

DEPARTMENT
OF
MILITIA AND DEFENCE
FOR THE
DOMINION OF CANADA
REPORT
FOR THE YEAR ENDED DECEMBER
1901

PRINTED BY ORDER OF PARLIAMENT



OTTAWA

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EXCELLENT MAJESTY

1902

To His Excellency the Right Honourable Sir Gilbert John Elliot, Earl of Minto and Viscount Melgund of Melgund, County of Forfar, in the Peerage of the United Kingdom, Baron Minto of Minto, County of Roxburgh, in the Peerage of Great Britain, Baronet of Nova Scotia, Knight Grand Cross of Our Most Distinguished Order of Saint Michael and Saint George, &c., &c., Governor General of Canada.

MAY IT PLEASE YOUR EXCELLENCY—

I have the honour to forward to Your Excellency the accompanying Report of the Department of Militia and Defence of the Dominion of Canada for the year ended December 31, 1901, which is respectfully submitted.

I have the honour to be, My Lord,

Your Excellency's most obedient servant,

F. W. BORDEN,

Minister of Militia and Defence.

DEPARTMENT OF MILITIA AND DEFENCE,

OTTAWA, March 12, 1902.

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PART I.

REPORT

OF THE

DEPUTY MINISTER

DEPARTMENT OF MILITIA AND DEFENCE,
OTTAWA, February 17, 1902.

The Honourable F. W. BORDEN,
Minister of Militia and Defence.

SIR,—I have the honour to submit to you the undermentioned reports concerning the work of the Department during the year ended June 30, 1901.

1. The Report of the General Officer Commanding the Militia with appendices respecting the Active Militia and the Permanent Force, and the Report of the Commandant of the Royal Military College for the calendar year 1901.
2. The Report of the Chief Superintendent of Military Stores.
3. The Report of the Chief Engineer of the Department respecting the work done under the supervision of the Engineer Branch.
4. The Report of the Superintendent of the Dominion Arsenal.

In each of the Reports mentioned will be found full details of the work carried on during the year in the respective Branches of the Department.

The following is the Financial Statement for the fiscal year ended June 30, 1901 :

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FINANCIAL Statement for the Year ending June 30, 1901.

VOTES FOR MILITIA SERVICES, 1900-1901.		EXPENDED.
		\$ cts.
By Statute—		
Pay of General Officer, Adjutant General and Q. M. General		10,480 30
By Vote—		
Pay of Staff, Permanent Corps and Active Militia, including allowances.....		355,135 39
Halifax Provisional Garrison.....		349,870 65
Yukon Contingent		14,321 05
Annual Drill of the Militia.....		454,357 20
Salaries and Wages of civil employees ..		86,494 94
Military properties, works and buildings.....		302,830 93
Warlike and other stores ..		85,170 69
Clothing and necessities.....		209,656 63
Provisions, supplies and remounts.....		121,790 13
Transport and freight.....		39,823 76
Grants in aid of Artillery and Rifle Associations and Bands and Military Institutes...		36,035 00
Miscellaneous and unforeseen contingencies.....		21,901 80
Royal Military College of Canada.....		72,520 12
Monuments—Battlefields of Canada ..		
Government Cartridge Factory.....		110,783 23
General service medals.....		6,822 45
Defences, Esquimalt, B.C.....		128,140 00
Capital Account—Arms, Ammunition and Defences.		131,551 04
Rifle Ranges.....		4,333 75
Special Service—South Africa.....		558,810 77
Claims for Compensation—		
Family of R. Roussell, Quebec, gratuity.....		62 00
Lieut. McLeay.....		750 00
W. E. Fegan.....		500 00
Amable Frigon.....		200 00
Lt.-Col. McGill, R.M.C.....		3,183 55
Sgt.-Major Dingley, R.C.D.		715 00
Pan-American Exhibition (received from Department of Agriculture)		1,992 85
Total.....		3,097,752 93
<i>Pensions.</i>		
By Vote--		
Pensions—Militia, Rebellion, 1885.....		18,101 78
" " Fenian Raids, &c		2,339 00
By Statute—		
Pensions—Militia, Upper Canada, Rebellion '37, '38.....		800 00
Total.....		21,240 78

REVENUE.

	\$ cts.	\$ cts.
Casual		37,777 10
Ammunition, Stores and Clothing.....	13,924 08	
Miscellaneous.....	5,191 11	
Rents of Military Properties	6,542 58	
		25,657 77
Royal Military College.....		22,035 98
Total Revenue.....		85,470 85

J. W. BORDEN,
Accountant.

I have the honour to be, Sir,
Your obedient servant,

L. J. PINAULT, Colonel,
Deputy Minister of Militia and Defence.

APPENDIX 1

TO THE

REPORT OF THE DEPUTY MINISTER

OF

MILITIA AND DEFENCE

REPORT OF THE CHIEF SUPERINTENDENT OF STORES.

SIR,—I have the honour to report, as follows, on matters affecting the Branch of the Department under my direction:

The work of the Staff, both at head-quarters and at out-stations, has greatly increased during recent years. It is satisfactory, however, to be able to state that it is being carried on, cheerfully and well, by all ranks.

Exchanges of arms and equipment by regiments—replacing Snider rifles and buff accoutrements by Lee-Enfield rifles and Oliver equipment ; issues to newly organized corps—Mounted Rifles, Engineers, Infantry and Army Medical Service ; issues of rifles and ammunition to civil and military Rifle Associations ; the visit of their Royal Highnesses, the Duke and Duchess of Cornwall and York, following immediately after the annual camps of instruction in the several Military Districts, have all served to make 1901 a very busy year.

The following statement of issues of clothing, made from the Head-quarters' stores in connection with the Royal visit will give an idea of the labour entailed by this particular item:

Articles.	Cavalry.	Artillery.	Infantry.	Rifles.
Tunics, cloth.....	331	110	676	1,237
Frocks, serge.....	1,116	842	6,207	2,424
Trousers, pairs	44	383	6,215	1,130
Breeches, riding, pairs... ..	906	181	.....	.....
Caps, field service.....	.....	.....	3,917	647
Caps, forage.....	393	195	.....	.....
Greatcoats .....	.....	.....	.....	2,729
Cloaks .....	.....	.....	.....	507

The large issues of camp equipment, &c., called for by the mobilization of 20,000 men, at a time when two Brigade camps, Sussex and Aldershot, were still in training, taxed the resources of the Branch to the utmost, and fully proved the force of my previous recommendations as to the necessity which exists for a largely increased

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stock being kept in store to meet emergencies. It is safe to say that if these recommendations had not, in part, been acted upon, it would have been impossible to meet the demands which were made. A large increase is still required.

CAMP EQUIPMENT.

The number of marquees and circular tents received annually, is barely sufficient to meet losses by storm during camp, and to cover the usual wear and tear. Five hundred, at least, of the circular tents in store, have been condemned by Boards of Officers as unfit for camp purposes, they cannot, however, be disposed of until replaced by others, as they would have to be used in case of emergency. A larger appropriation is requested this year for the purchase of these articles.

LEE-ENFIELD RIFLES AND OLIVER EQUIPMENT.

Several regiments have been supplied with these during the year, as recommended. The Armourers have been kept busy marking and numbering the rifles, bayonets, scabbards, &c. As mentioned in last annual report, the Armourers were sent to the camps of instruction for the purpose of examining the rifles in possession of the troops. As expected, many repairs were found necessary and were carried out on the spot. The work of the Armourers is now largely on the increase; the new rifles require more attention and there is no doubt, but that when the force is more fully armed with them and the necessity for browning arises, an increase in the staff will be necessary.

It is intimated here for general information, that the breech blocks of rifles are not interchangeable and caretakers should be particular to put the block back into the rifle to which it belongs after cleaning, if this is not done it is possible that an accident may result. Notwithstanding the fact that it was published in Militia Orders that rifles were not to be interfered with, except by the Departmental Armourers, it is found that the sights of the rifles and the swivels are being constantly tampered with and thus rendered unserviceable.

RIFLE ASSOCIATIONS.

During the year, 719 rifles and over *a million and a half* cartridges have been issued to newly organized Rifle Associations. The former have been issued under bond for safe keeping and return when called for, the latter free. It is suggested that a supply of rifles be ordered to cover issues already made for this purpose and to meet future demands.

SMALL ARM AMMUNITION.

In view of the large issues of Small Arm Ammunition likely to be made in the future, an increased output from the Government Arsenal is now necessary.

AIMING TUBES AND MANTLETS.

These are now being gradually brought into use by regiments for training recruits during the winter months—issues being made as recommended. The condition of many of the tubes, when returned from camp, indicates a want of proper supervision or care in their use. In one instance 33 out of a total of 48, were returned unserviceable, as many as seven bullets having to be removed from one tube. In the majority of these cases the tube is bulged and jammed in the rifle, which is also rendered unserviceable. 650,000 rounds of ammunition were issued during the year.

SESSIONAL PAPER No. 35

HELMETS.

Helmets were distributed to the militia this year for the first time. It is proposed to issue to one third of the force annually, thus completing the whole in three years. Selection of the corps to receive them, during first, second and third years having been made by the District Officers Commanding. Over 12,000 have been distributed.

HARNESS AND SADDLERY.

On the return of the Special Service Batteries, 'C' 'D' and 'E,' from South Africa, the several parts of the harness and saddlery brought back by them were examined by the Departmental Saddler and such as were found fit for further use were cleaned, repaired and re-issued. The severe strain to which the harness was subjected was very apparent from its condition. A supply of harness of the rapid release pattern, for equipment of the batteries expected from England at an early date should be provided. New saddlery was issued during the year to the newly organised squadrons of Mounted Rifles. Nearly six hundred sets are now required for issue to Cavalry regiments, owing to recent increase in strength, as also a supply to keep in reserve to meet probable demands from fair wear, &c.

STORE BUILDINGS.

Reference is requested to recommendations on this subject, in previous reports. New store buildings are urgently required in Toronto and Kingston. Those now in use are constructed of wood, very old, and in constant need of repair. No proper care can be taken of the valuable material stored in them. The heating is carried on with ordinary stoves—it is insufficient and unsafe. It was hoped that the new building at Ottawa would have been handed over to the Department for occupation during the summer, this has not been the case, the result is want of proper supervision, much inconvenience, and extra labour, in consequence of the scattered position of the stores in several buildings widely separated.

The want of magazine accommodation at several points, as previously reported, is emphasized. This is a matter of urgent necessity.

MILITARY PROPERTIES.

I have been unable, owing to pressure of other business, to visit the military properties in charge of the Department during the year; the several superintendents of stores and caretakers report favourably.

Although Major Benoit (the secretary of the Department) does not come, in any way, under the Military Store Branch, yet the official relations between him and myself are very closely associated, hence I would like to speak of the valuable assistance he has at all times given in connection with Militia Supplies, for which there is a constant demand. His work in this regard, has been of great service to my Branch.

D. A. MACDONALD, Colonel,
Chief Superintendent of Military Stores.

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SMALL ARM Ammunition issued on repayment from July 1, 1900, to June 30, 1901.

Military Districts.		Rounds.	Amount.
			\$ cts.
Military District No.	1—London.....	53,400	559 10
"	2—Toronto.....	134,401	1,973 65
"	3—Kingston.....	9,900	147 10
"	4—Ottawa.....	60,625	1,047 69
"	5 and 6—Montreal.....	73,600	659 50
"	7—Quebec.....	13,400	199 50
"	8—St. John, N.B.....	20,900	321 37
"	9—Halifax, N.S.....	7,030	70 45
"	10—Winnipeg.....	109,208	1,725 80
"	11—Victoria, B.C.....	62,016	893 05
"	12—Charlottetown, P.E.I.....	27,828	371 60
Total		572,308	7,970 81

	Rounds.
Lee-Enfield—Ball ..	427,583
Martini-Henry—Ball ..	20,400
Snider—Ball.....	91,125
Snider—Blank.....	6,900
Morris Tube.....	25,700
Revolver—Colt's.....	600
	572,308

D. A. MACDONALD, Colonel,
Chief Superintendent of Military Stores.

SMALL ARM Ammunition issued for Practice from July 1, 1900, to June 30, 1901.

Military Districts.		ROUNDS.	
		Ball.	Blank.
Military District No.	1—London.....	175,260	35,330
"	2—Toronto.....	357,910	109,430
"	3—Kingston.....	118,355	36,945
"	4—Ottawa.....	115,530	13,940
"	5 and 6—Montreal..	146,100	52,020
"	7—Quebec.....	110,480	20,960
"	8—St. John, N.B.	57,060	9,000
"	9—Halifax, N.S.	242,310	76,700
"	10—Winnipeg	39,420	5,480
"	11—Victoria.....	37,620	4,900
"	12—Charlottetown, P.E.I.....	46,222	4,800
Issued to Militia Corps for Rifle League Competition.....		314,400	
Total		1,760,767	369,505

D. A. MACDONALD, Colonel,
Chief Superintendent of Military Stores.

SESSIONAL PAPER No. 35

RETURN of Gunpowder and Friction Tubes issued for Practice and Salutes from July 1, 1900, to June 30, 1901.

Military Districts.	Stations.	Corps.	Gud-powder.	Friction Tubes.
			Lbs.	No.
No. 1....	London.....	Field Batteries of Artillery.....	332	310
No. 2....	Toronto....			
No. 3....	Kingston.....			
No. 4....	Ottawa.....	Field and Garrison Artillery, Royal Military College and Royal Canadian Artillery.....	6,134	4,245
Nos. 5 & 6.	Montreal.....	Field Battery and Salutes.....	639	231
No. 7....	Quebec.....	Field and Garrison Artillery and Salutes.....	818	410
No. 8....	St. John, N.B. ...	" "	9,406	2,537
No. 9....	Halifax, N.S.	" "	1,467	675
No. 10 ...	Winnipeg.	" "	188	280
No. 12....	Charlottetown, P.E.I.	Field Battery and Salutes.....	585	660
		" "	1,025	245
		Total	20,534	9,593

D. A. MACDONALD, Colonel,
Chief Superintendent of Military Stores.

TENANTS and Rental from July 1, 1900, to June 30, 1901.

Number of Tenants.	Station.	Rents Received.	Remarks.
		\$ cts.	
5	London, M. D. No. 1.....	212 75	
8	{ Toronto } M. D. No. 2.....	512 00	
	{ Niagara }		
24	{ Kingston } M. D. Nos. 3 and 4....	956 96	
	{ Ottawa }		
7	Montreal, M. D. Nos. 5 and 6.....	558 50	
45	Quebec, M. D. No. 7.....	4,005 96	
8	St. John, N.B., M. D. No. 8.....	302 25	
13	Halifax, M. D. No. 9.	83 42	
2	Charlottetown, M. B. No. 12.....	10 74	
112	. . . . .Total number of tenants.		
	Total amount of rents received ...	6,542 58	

D. A. MACDONALD, Colonel,
Chief Superintendent of Military Stores and
Keeper of Military Properties.

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DEPOSIT RECEIPTS.

The statement underneath will show the amounts received by the Store Branch for ammunition and stores issued on repayment, as well as for military rents during the fiscal year ending June 30, 1901.

Ammunition.	Military Stores and Clothing.	Miscellaneous.	Rents.	Total amount.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
7,970 81	7,765 85	8 00	6,542 58	22,287 24

D. A. MACDONALD, Colonel,
Chief Superintendent of Military Stores.

STATEMENT of Issues from July 1, 1900, to June 30, 1901.

Tunics, Cloth.		Tunics, Serge.		Trous- ers, Cloth, Pairs.		Trousers, Serge, Pairs.		Forage and Field Service Caps.				Great Coats and Cloaks.		Panta- loons, Pairs.		Field Hospital and Bearer Companies.			
218	Cavalry.	971	Cavalry.	417	Cavalry.	620	Artillery.	832	Cavalry.	221	Cavalry.	953	Cloaks.	856	Cavalry.	213	Serge Tunics.	192	Long Trousers.
234	Artillery.	908	Artillery.	234	Artillery.	9,014	Infantry.	980	Artillery.	354	Artillery.	6,630	Great Coats.	402	Artillery.				
509	Infantry.	8,848	Infantry.	532	Infantry.					7,741	Infantry.								
562	Rifle.	1,653	Rifle.			2,280	Rifle.			2,530	Rifle.							201	Service Caps.

D. A. MACDONALD, Colonel,
Chief Superintendent of Military Stores.

APPENDIX 2

TO THE

REPORT OF THE DEPUTY MINISTER

OF

MILITIA AND DEFENCE

REPORT OF THE CHIEF ENGINEER.

OTTAWA, August 28, 1901.

SIR,—I have the honour to submit herewith my annual report for the period ending June 30, 1901.

MILITARY BUILDINGS.

The present system by which the Public Works Department construct all military buildings is very unsatisfactory, and considerable trouble and delay is occasioned thereby. I would strongly urge the necessity of having the construction, as well as the maintenance and repairs of these buildings under the charge of the Engineer Branch of the Department of Militia and Defence.

RIFLE RANGES.

A large number of rifle ranges of a permanent nature are now being constructed by this department. The target frames are of steel, set in concrete. The markers' shelter is constructed with a masonry or concrete retaining wall, and earth embankment, platform and drainage. When no natural hill or stop butt exists to catch the bullets, artificial timber cribwork filled with broken stone is used for the purpose. A number of good rifle ranges have been constructed with a water background, such as is furnished by the great lakes or the sea; a stop butt is then not required.

FORTIFICATION WALLS, QUEBEC.

The repairs to the fortification walls at Quebec on the town lines are almost completed, but there is still a large amount of work required at the Citadel and the Levis forts.

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HEATING SYSTEMS.

The central heating systems by hot water at the different Military Schools and barracks throughout the Dominion are about completed, and have resulted in a large saving of fuel.

LIGHTING SYSTEMS.

An isolated electric light plant is now being installed at the Royal Military College, Kingston, and others are proposed which will result in a considerable annual saving.

SANITARY ARRANGEMENTS.

The sanitary arrangements for the military buildings and barracks have been modernized during the past three years. This was badly required.

OFFICE ROOM.

I would respectfully call your attention to the fact that more office room is required in the Engineer Branch, as the work has increased very much during the past three years, necessitating more room for filing plans, dockets, &c., and for draughting.

GENERAL REPAIRS.

The following works were carried out under the supervision of the Engineer Branch in the several military districts throughout the Dominion from January 1 to June 30, 1901.

MILITARY DISTRICT No. 1.

LONDON, ONT.

Wolseley Barracks.—The barracks sewage system has been connected with that of the City of London. A new plank walk was renewed on the west side of the barracks, and an ash pit constructed. The buildings and quarters generally were repaired and plumbing put in order.

Store Buildings.—Small repairs were made to the water service at these buildings.

Rifle Range.—A new rifle range is now being constructed here for six targets and is nearly completed.

Drill Hall.—A new drill hall is being erected here by the Department of Public Works.

CHATHAM, ONT.

Drill Shed.—The roof, fascia and ridge boards of this building were renewed.

SARNIA, ONT.

Armoury.—Oliver equipment racks were fitted up for the 27th Regiment.

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MILITARY DISTRICT No. 2.

TORONTO, ONT.

Stanley Barracks.—The installation of a hot-water heating system at these barracks is completed. An automatic syphon range water closet was fitted up in the men's quarters. The buildings and quarters were repaired generally.

Drill Hall.—The drainage from the boiler room was put in order, the floor and joists in the N. E. Tower were renewed and general glazing done. The employees of the drill hall were supplied with a set of plumbing tools to enable them to carry out urgent work of that nature.

Store Buildings, Old Fort.—General repairs were carried out at the Block House. The ceiling of the armourer shop was sheathed, the floor of the browning shop renewed, and general repairs made to the plank walks. The roofs of the store buildings are now being renewed.

BARRIE, ONT.

The armoury here has been re-roofed, and rifle racks were placed in rooms in the Post Office building.

HAMILTON, ONT.

Drill Hall.—The heating system in this building was repaired, and sewer drainage put in order.

Rifle Range.—The markers' trench and parapet were put in order at this range.

NIAGARA FALLS, ONT.

Camp Grounds.—The rifle range at this camp was repaired generally and put in working order.

Latrines were put up for the camp, and barn and fences at Staff Quarters were whitewashed.

ST. CATHARINES, ONT.

Rifle Range.—A survey and plan of a proposed range on the lake shore, west of Dalhousie port, was made.

Drill Hall.—A new drill hall is now being built here by the Department of Public Works.

SIMCOE, ONT.

Drill Hall.—A chimney on this building was repaired, and the furnace grate renewed.

YORK, ONT.

Drill Hall.—The central armoury for the 37th Regiment was completed, and the eave troughs on this building renewed.

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MILITARY DISTRICTS Nos. 3 & 4.

KINGSTON, ONT.

Tete de Pont Barracks.—Barracks were fitted up for 'B' Field Battery, upon being transferred there from Quebec, and temporary stable accommodation provided; also hospital, canteen, and recreation room, and store accommodation fitted up. All quarters were put in proper repair.

Camp Grounds, Barriefield.—The caretaker's quarters were painted.

ROYAL MILITARY COLLEGE.

Buildings and Grounds generally.—These buildings and grounds were kept in proper repair. An addition is now being built to the dormitory building for new bath rooms and water closets for the cadets.

Hospital.—A new hospital is now under construction by the Department of Public Works.

PETERBOROUGH, ONT.

Drill Hall.—The eave troughs were renewed and chimney repaired on this building.

OTTAWA BRIGADE, OTTAWA.

Rockcliffe Rifle Range.—A large well was constructed at this range, and water and sewage service installed in the D. R. A. Building. The range was put in order generally, and fittings constructed for the musketry camp.

Drill Hall.—Fittings were provided for two additional companies of the Governor General's Foot Guards. A Morris Tube Rifle range was fitted up, and the building kept in repair generally.

Nepean Point.—The gun platforms on these grounds were renewed, and the guns painted. The flag pole was also repaired.

Bearer Co. Armoury.—Fittings were provided and placed in this company's temporary quarters in the Slater Block.

Store Building.—The new store building is now completed, with the exception of interior fittings.

MILITARY DISTRICT No. 5.

CHAMBLY, P.Q.

Old Fort.—The old walls at Fort Chambly are now being repaired and pointed to preserve the same. The caretaker's house inside the fort is being put in order, and the fence around the old military cemetery is being renewed.

DACHUTE, P.Q.

Central Armoury.—An armoury was fitted up here for 'B' Squadron, 6th Hussars and the 11th Regiment of Infantry, in a building leased by the government.

SESSIONAL PAPER No. 35

MONTREAL, P.Q.

Drill Hall.—A central armoury was fitted up for the 85th Regiment, a new floor was laid in the armoury of the Duke of York's R. C. Hussars, and the plumbing put in repair generally.

Rifle Range.—The rifle range at Point aux Trembles is now almost completed, and will be ready for practice about the first of August. Forty targets are being provided.

WATERLOO, P.Q.

Armoury.—A central armoury was fitted up in the market building for the 79th Regiment.

MILITARY DISTRICT No. 6.

ST. JOHNS, P.Q.

The Barracks.—The roof of the hospital was renewed. Equipment racks were fitted up in the men's barrack rooms. An officers' stable was provided. The eave troughs and down pipes on the roofs of all barrack buildings were put in order. Men's cooking range was repaired, and general repairs carried out.

MILITARY DISTRICT No. 7.

QUEBEC.

Fortification Walls.—The following walls were rebuilt, repaired, or put in order generally :—The wall in St. Valier Street, in rear of the Dominion Arsenal, partly rebuilt; completed. King's Bastion wall, Citadel, partly rebuilt; almost completed. Kent and St. Louis Gates, pointed and completed. Wall on Palace Hill, rebuilt and altered to allow of widening the street; completed. Dalhousie Bastion wall, Citadel, partly rebuilt and completed. Wall in ditch, in rear of Military Store Buildings, Citadel Hill, being rebuilt; still under way.

The fortification walls in various other parts of the Citadel and town lines are now being rebuilt. A list of which will appear in my next report.

Citadel.—The buildings in the Citadel were repaired generally. Officers, non-commissioned officers and men's quarters put in order, and plumbing overhauled.

Drill Hall.—A new block floor was laid in the main hall of this building, which greatly improves it for drill purposes. Clothing cupboards were provided for the 8th Royal Rifle Cadet Corps. New iron ladders were provided.

The interior walls of the main hall were painted, roof repaired, and general plumbing and glazing done. The exterior walls are now being pointed, and a new porch and woodshed being provided.

Military Stores.—The Queen's Wharf stores have been fitted up, and caretaker's quarters provided there.

The Military Store buildings on the Citadel Hill were repaired generally, and the foreman of stores' quarters fitted up.

'A' and 'B' Magazines, Citadel, were thoroughly fitted up, and the wall around 'A' Magazine is now being rebuilt.

Militia Offices.—A new hot water heating system was installed in this building, drainage put in order, and general repairs made.

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R. C. R. I. Barracks.—These buildings were repaired generally. Alterations are now being made to fit up a new guard room, officers' stable, and men's barrack rooms in the gun shed recently occupied by 'B' Field Battery.

Married Men's Quarters, St. Louis St.—These quarters were fitted up generally. The walls around the inclosure are now being rebuilt and put in repair.

Officers' Quarters, St. Louis St.—These quarters were kept in repair, and a hot water heating system installed in those now occupied by Lieut.-Col. Benson.

DOMINION ARSENAL.

Main Factory.—An elevator and hoist were fitted up. Large weigh scales provided and put up, and the building kept in repair generally.

The building at the corner of Palace Hill is being altered for additional accommodation for the increase of the factory plant.

Shell Factory.—The heating of this building was put in order, and small repairs made. An extension is now being made to this building for an increase of the plant.

Laboratory Buildings.—These buildings were kept in repair, and plumbing put in order. An extension is now being built to No. 2 Danger Building.

Rolling Mill.—The rolling mill at the main factory, now being built by the Department of Public Works, should be completed by the autumn.

Artillery Workshop.—Plans are now being prepared for the erection of a new building, to be used for the repairs to, and construction of, artillery ordinance, military vehicles, &c.

Iron Foundry.—Plans are also being prepared for a new building for this plant.

LEVIS, P.Q.

Rifle Range.—The present 600 yards range is now being fitted up with twelve standard steel target frames, and a concrete revetment made for the protection of the markers.

A new 1,000 yards range is also being fitted up, adjoining the present range, for two targets. A concrete wall for the protection of the markers, standard target frames, stop butt, firing points and telephone system is being provided.

Engineer Park.—The buildings here have been put in good order, and the camp grounds near by were fitted up.

MILITARY DISTRICT No. 8.

FREDERICTON, N.B.

The Barracks.—The new hot water heating systems installed in the officers' and men's barracks and hospital building were completed, and prove very satisfactory. A new wash room was provided at the men's barracks, and a new concrete floor laid down. A new coal, straw shed and carpenter shop was built. The interior of the hospital was painted. New woodsheds provided at Park Barracks. Oliver equipment racks were fitted up in the men's barrack rooms. The exterior of officers', men's and Park Barracks was painted. The fences around all barrack buildings have been renewed or repaired.

Drill Hall.—A new floor was laid in the main hall, and general repairs made to this building. A central armoury was fitted up here for the 71st Regiment.

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NEWCASTLE, N.B.

Gun Shed.—This building recently purchased by the government has been fitted up as a gun shed and harness room for the 12th Field Battery.

ST. JOHN, N.B.

Rifle Range.—The new rifle range at the Old Rope walk is now nearly completed, and is open for practice.

Dorchester Battery.—A picket fence was rebuilt here.

Drill Hall.—This building was kept in repair, and plumbing put in order.

Fort Howe.—The water service at the Magazine was put in order.

Red Head Battery.—The fences were repaired here.

Store Buildings.—These buildings were repaired generally.

MILITARY DISTRICT No. 9.

HALIFAX, N.S.

Store Buildings.—The old drill shed was fitted up as a store building, and quarters provided for the superintendent of stores at the militia offices.

Drill Hall.—A few minor repairs were made to this building.

BEDFORD, N.S.

Rifle Range.—The new rifle range here is almost completed, and will be ready for practice by the autumn. Twenty-two targets are being provided.

KENTVILLE, N.S.

Armoury.—A central armoury was fitted up in the drill hall for the 68th Regiment, and the roof of the building was renewed.

MILITARY DISTRICT No. 10.

WINNIPEG, MAN.

Cavalry Barracks.—A new water service was provided at these barracks. Drainage was put in repair. The heating apparatus was thoroughly overhauled, and the buildings generally repaired.

Drill Shed.—The caretaker's quarters were put in good order, and the building repaired generally.

MILITARY DISTRICT No. 11.

NELSON, ROSSLAND, KASLO, KAMLOOPS AND REVELSTOKE, B.C.

Rifle Ranges.—New rifle ranges were constructed at each of the above mentioned places, for companies of the Rocky Mountain Rangers.

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Drill Sheds.—New company drill sheds are now being erected at the above mentioned places for companies of the Rocky Mountain Rangers, by the Department of Public Works.

NEW WESTMINSTER, B.C.

Drill Hall.—Small repairs were made to this building.

VICTORIA, B.C.

Store Building.—General alterations and repairs were made to this building, and quarters of the foreman of stores put in repair.

Marine Hospital Barracks.—The interior of this barracks was repaired, kalsomined and cleaned after its occupancy by 'A' Company, S. S. R. C. Regiment, and prior to handing over the building to the Department of Marine and Fisheries.

Rifle Range.—The new rifle range at Clover Point was completed, and opened for practice.

VANCOUVER, B.C.

Drill Hall.—The new drill hall is now almost completed by the Department of Public Works.

MILITARY DISTRICT No. 12.

CHARLOTTETOWN, P.E.I.

Drill Hall.—This building is now being extended, altered and fitted up as a central armoury, in addition to drill accommodation.

SUMMERSIDE, P.E.I.

Drill Shed.—This building was repaired generally.

GENERAL.

Minor Barrack Services.—The artificers at all the 'permanent stations' and the Dominion Arsenal, were provided with lumber and material with which to carry out small repairs to military buildings and properties.

Morris Tube Mantlets.—A number of these mantlets and targets complete, were supplied at various drill halls and camps of instructions, for rifle practice with miniature ammunition.

I have the honour to be, sir,

Your obedient servant,

PAUL WEATHERBE, Major,
Chief Engineer, M. and D.

APPENDIX 3

TO THE

REPORT OF THE DEPUTY MINISTER

OF

MILITIA AND DEFENCE

DOMINION ARSENAL, QUEBEC, November 2, 1901.

SIR,—I have the honour to report as follows upon the operations of this establishment for the fiscal year ended June 30, 1901.

In consequence of additions to this establishment, the designation 'Government Cartridge Factory' had become inappropriate, and a change to that of 'Dominion Arsenal' was approved.

CARTRIDGE FACTORY.

The main difficulties attending the manufacture of small-arm ammunition have been overcome, and for the past two years we have received practically no complaints. At both meetings of the Dominion Rifle Association in the years mentioned the competitors have expressed satisfaction, and the high scores made testify to the uniformity of cartridges supplied.

Machinery required to equip the rolling mill has been received from England and is being installed in the new buildings. All materials required for the operation of this mill have been purchased, and it is hoped that work may begin as soon as the new buildings are available.

The manufacture of cannon cartridges has been taken up extensively; there is little difficulty connected with this class of work, and we are now in a position to meet all requirements of the artillery in this respect.

A number of copper friction tubes have been partly manufactured and will be completed as soon as machinery is installed to make air-tight cylinders in which the tubes are stored; the tools required have been ordered and are expected shortly. We have all the facilities for the manufacture of tubes, and can be relied upon for supply of any quantity required hereafter.

The question of providing suitable ammunition for use on miniature ranges and in shooting galleries has been under consideration, as the result of reports received on Morris Aiming Tubes and ammunition. The objections to these tubes are that each man cannot use his own rifle, but must shoot from rifles fitted with tubes; that in camps of exercise the tubes are forgotten and become permanently rusted in the chamber of the rifle, and that the miniature ammunition affords no training in the loading of full-sized cartridges or magazine fire. Trials with full-sized cartridges have since

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been made, and most promising results have been obtained, leading to the belief that a cartridge fulfilling every requirement may shortly be issued for trial. The advantages claimed for the new cartridge are : accuracy equal to Morris Tube ; cheapness, the probable cost being only a fraction of a cent per round ; the cartridge case being full-sized, tubes may be dispensed with, thus enabling each man to use and become acquainted with his own rifle.

On different occasions, it has been proposed, by well-meaning but misinformed persons, that another cartridge factory should be erected in the western part of the Dominion. It may be well to explain that our present establishment is equal to meeting all actual requirements, and that orders received are so small it is just possible to keep together an effective working staff. A division of the work, by erecting another factory, would mean starvation and disaster to both. The strategical reasons urged against the situation of this arsenal are not well grounded.

SHELL FACTORY.

Work on cast-iron projectiles is being completed as rapidly as possible, and it is expected that no more will be manufactured, with the exception of those required for practice purposes.

A cast-iron common shell for 5-inch B.L. Howitzers to be used for practice in place of the steel lyddite shell was manufactured to save the large cost of the latter ; the cast-iron shell affords the same facilities for practice and training as the service shell.

Common shells for 40 pr. R.B.L. guns were also manufactured, and these, as well as the 5-inch shells, have given satisfaction at the annual practice of the garrison artillery. It may be mentioned that, with the exception of some obsolete segment shells which were being used up, the cartridges and shells employed at the last garrison artillery practice were entirely of Canadian manufacture.

A plant for the manufacture of modern forged-steel projectiles has been purchased and will be installed in a new building now in course of erection. This plant consists of a compound steam pumping engine, hydraulic accumulator and forging presses ; the machinery now used for finishing iron shells will serve the same purpose with steel projectiles. Work will be begun on 12 pr. B.L. shells and extended to higher natures, the capacity of the plant permitting manufacture of 6-inch shells, if required.

As only a limited number of iron projectiles were required, the men of this factory have been employed principally in manufacture and repair of artillery materials and stores. The sum of \$12,000 has been voted to the Department of Public Works for the erection of an iron foundry to replace the one now in use, which will be transformed into a brass foundry in connection with new rolling mill. We are waiting for the new building, to make required alterations.

ARTILLERY WORKSHOP.

It is proposed to establish this department in a new workshop to be erected adjoining our premises, at a cost of \$18,000, which has been voted to the Department of Public Works. To meet demands for stores, the staff of the shell factory were employed on this work, as already stated.

Two batteries of 12 pr. B.L. guns returned from South Africa were completely repaired and renovated. The carriages and vehicles were much damaged and required considerable work.

In addition to the foregoing, the guns and equipment of the 1st Field Battery, Quebec, have been thoroughly examined and repaired.

The Maxim machine guns and carriages returned from the war are being repaired and refitted similarly to field artillery equipment. Khaki paint has been adopted, in

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conformity with regulation notified for the Imperial service ; the question as to whether khaki is the best colour for this country might be considered.

Extensive repairs have been made to 40 pr. R.B.L. equipment.

Some 5-inch B.L. Howitzers have been overhauled and repainted.

Shafting has been erected for temporary operation of woodworking machinery, which will be transferred to the building adjoining Palace Hill as soon as it can be prepared for occupation.

The field gun sleighs belonging to 'B' Field Battery, R.C.F.A., of Rutherford pattern, for 9 pr. R.M.L. guns, will have alterations made to adapt them for use with 12 pr. B.L., which can be done at small expense. 'A' Field Battery, R.F.C.A., is equipped with a different pattern of sleigh, being an adaptation of Woolwich sleighs made by Colonel Drury. Both sleighs are made of wood, and possess many points of excellence.

MAINTENANCE AND REPAIRS TO BUILDINGS.

The following repairs and additions have been authorized, and will be carried out during the ensuing fiscal year.

Office Building.—Removal of water-closet and repairs to room.

Cartridge Factory.—Pointing walls of proof house. Wiring for electric light in Palace Hill building. Steam-heating Palace Hill building. Extension of main shaft.

Shell Factory.—Extension of factory for steel-shell plant. Brickwork and installation of two boilers. Erection of brass furnaces. New chimney. Transmission of power from cartridge factory. Rebuilding three furnaces. Foundations for hydraulic machinery.

Laboratory.—Extension of No. 2 danger building. Chimney top, watchman's quarters. Repairs to steam-boxes. Repairs to porch and windows, watchman's quarters.

Fulminate Buildings.—Repairs to roof of boiler-room. Repairs to steam-boxes.

Superintendent's Quarters.—Heating apparatus.

Engine Man's Quarters.—Repairs to windows and sheathing one room.

General.—New water-closet.

The considerable additions made to buildings will necessitate the early consideration of installing a proper low-pressure heating system, as has been already recommended. We have ample exhaust steam, a large portion of which is going to waste through not having necessary apparatus to circulate it, and the wasteful system of heating by live steam has to be employed. The saving in fuel will pay for this outlay in a very short time, and it is proposed to submit an estimate of work required.

Extensive repairs have been made to the fortification walls bounding these premises on the west side of Artillery Park, and in Palace Hill and St. Valier street. Advantage of this was taken to leave large openings in the wall which will form windows for the new shell factory. The additions made necessitate a complete reconstruction of the lighting system, for which money has been appropriated, and it is expected that the work can be completed during the course of a year.

An archway, which has been most useful, was cut through the cartridge factory building to give access to the new coal shed and permit of erection of wagon scales.

The annual sanitary inspection has been held as usual, and the recommendations made by the medical board will be given careful consideration.

The usual inspection of boilers, &c., has been performed by the inspector of the Department of Marine and Fisheries, and everything found in satisfactory condition.

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The operations of the ensuing fiscal year will be of particular interest, as it is expected that the construction of buildings and installation of new machinery will result in the realization of projects which have been under consideration for some years past. The hope is expressed that this establishment may soon be in a position to aid in promoting efficiency by giving substantial assistance to all branches of the service, and at an early date the department will have the satisfaction of seeing the policy of building up of a national arsenal put into successful execution.

I have the honour to be, sir,

Your obedient servant,

F. M. GAUDET, *Major,*
Superintendent Dominion Arsenal.

To the Deputy of
The Honourable the Minister of Militia and Defence,
Ottawa.

PART II.

REPORT

OF THE

GENERAL OFFICER COMMANDING

The Honourable
The Minister of Militia and Defence,
Ottawa.

SIR,—I have the honour to submit the following report upon the Militia Forces and Establishments under my Command for the year ending December 31, 1901.

INSPECTIONS.

(1.) During the year I carried out the Annual Inspection of all the units of the Permanent Forces, with the exception of the Canadian Mounted Rifles at Winnipeg, and I inspected the Camps of Instruction for the Rural Militia at London, Niagara-on-the-Lake, Deseronto, Barriefield (Kingston, Ont.), Three Rivers and Point Lévis. The Camps at Aldershot, N.S., and Sussex, N.B., I was unable to visit owing to press of work at Head-Quarters in connection with the visit of their Royal Highnesses the Duke and Duchess of Cornwall and York. I also had the opportunity of inspecting some of the Urban Corps.

INSPECTION REPORTS.

(2.) In order to bring the Inspection Reports rendered by the District Officers Commanding, more into conformity with modern requirements, I have introduced new Forms of Report for each Arm of the Service, which will give much fuller information as to the efficiency of the Corps than those heretofore rendered, and I hope they will prove useful records of the state and condition of the Forces.

PERMANENT TROOPS.

(3.) *3rd (Special Service) Battn. Royal Canadian Regiment.*—I made a very careful inspection of this unit, and it is with very great pleasure that I can report upon it in most favourable terms. In drill, discipline and interior economy the battalion has well maintained its reputation for efficiency, and, as was to be expected, I noted in many

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respects a marked improvement since my last inspection. There were a number of recruits in the ranks, but the type of men was distinctly superior to those originally enlisted. The health of the Battalion was reported to be very good, and the conduct of the men quite satisfactory. The Regimental Institutions appeared to be well arranged, and the comfort of the non-commissioned officers and men carefully looked after. The musketry training of this Battalion was most creditable.

ROYAL SCHOOLS OF MILITARY INSTRUCTION.

4.) In my report for the year 1900, I adverted to the difficulties against which the units of the Permanent Forces had to contend by reason of the number of officers, non-commissioned officers and men on service with the Contingents in South Africa. This year I have had the opportunity of seeing them under normal conditions, and it gives me great pleasure to be able to report that the general result of my inspections was very satisfactory as regards their discipline, training, conduct and administration, but I regret to say that all branches are considerably below their established strength, so much so indeed that I cannot consider them thoroughly efficient, even for instructional purposes. The reason why difficulty is experienced in obtaining recruits will probably be found in the great commercial and agricultural prosperity of the Dominion and the consequent demand for civil labour at a high rate of wages. It is also a matter of common notoriety in the Military Service that the smaller the establishment the harder it is to maintain it at full strength.

In my opinion the most effectual measure for maintaining the establishment of the Permanent units will be a readjustment of the rates of pay so as to bring the emoluments of the soldier, inclusive of his rations, clothing, medical attendance and quarters, more on a level with the wages he could earn in civil employment. The present rate of daily pay is 40 cents, or 10 cents less than is paid to militiamen for annual training and to men serving in the 3rd (S.S.) Battalion of the Royal Canadian Regiment at Halifax, N.S., and to this I think may be attributed the desertions that usually occur in the early summer, when the demand for labour is on the increase. In so small a force there is no use for men of inferior stamp. We need the very best, and there appears no reason why the militia should not succeed equally with the Northwest Mounted Police if we compete in the labour market on fairly even terms.

The object for which the Permanent Force is maintained is primarily to furnish schools of instruction in which Officers, Non-Commissioned Officers and men of the Active Militia can not only be trained in drill, tactics and discipline more fully and practically than with their own units, but also learn the interior administration and the routine of duties pertaining to their respective arms of the service. They should also be able to acquire the habits and demeanour of officers and soldiers, in order that they may serve as models for the Corps to which they belong. To this end all ranks of the Permanent Corps exert themselves and do their utmost to carry out their important duties as far as circumstances will permit, the classes receiving very careful instruction.

Cavalry.—The Cavalry School at Toronto would be able to perform its work very satisfactorily if the establishment of its two squadrons was increased by 1 Major, 1 Captain, 2 Lieutenants, 12 Sergeants, and 60 Rank and File, and 72 horses. This increase would admit of the classes being divided so that Officers of the senior ranks could be trained in more advanced and up-to-date Cavalry tactics than is practicable with the present establishment, and the routine administration of a cavalry unit could be learned under much more favourable conditions. I strongly recommend this for favourable consideration.

Artillery.—The Royal Canadian Field Artillery being now organized as a Brigade Division should, if up to its establishment, be perfectly able to carry out its instructional duties, but to render it thoroughly efficient, 'B' Battery should be raised to the higher establishment. In view of the highly technical nature of a Field Artilleryman's

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duties, the length of time required to train both Gunners and Drivers, and the importance of keeping these Batteries up to the highest standard, I urge the necessity of this small increase in men and horses, viz.: 4 Sergeants, 78 Rank and File, 13 horses.

The Garrison Artillery also should, if complete in its establishment, be able to furnish an efficient school of instruction, but the two small companies that we maintain at present are quite insufficient for the proper performance of the important garrison duties they are called upon to carry out in the Fortress of Quebec, and as more modern and valuable ordnance is acquired and mounted at the various selected sites, it will become imperative to considerably increase this arm of the service. Modern guns of position and their equipment are so costly, and their preservation requires such careful attention and knowledge of mechanical detail, that it is of great importance to maintain the Garrison Artillery in a very high state of technical and numerical efficiency.

I consider the addition of a 3rd company most necessary.

Infantry.—As regards the Infantry, the Royal Canadian Regiment with an establishment in Officers, Non-Commissioned Officers and men calculated for 4 schools of instruction, is now called upon to provide 5, the result, naturally, being unsatisfactory alike for the Regiment and for those attending the instructional courses. The only remedy is to increase the establishments, but I do not hesitate to state my opinion that the object for which these Depots are kept up would be far better attained if in lieu of 5 attenuated units, we had 4 stronger ones in which the regimental routine and administrative detail could be more thoroughly observed, and instruction of a practical nature given in modern Infantry tactics, which at present is quite impossible by reason of the paucity of men available for parades.

With this view, I strongly recommend that each of the Infantry Schools should consist of 2 complete companies with an establishment of 1 Major, 2 Captains, 3 Lieutenants (one of these to be Adjutant and Quarter-Master), 2 2nd Lieutenants, 1 Sergeant Major (Warrant Officer), 1 Quarter-Master Sergeant, 2 Colour Sergeants, 5 Drill Instructors, 6 Sergeants, 8 Corporals, 4 Drummers, 4 Buglers, and 120 Privates, or 136 Rank and File.

With such an establishment the instructional work could be carried out in a thoroughly efficient manner, and these units, in the event of such a necessity arising, would form the nucleus of 4 service battalions of regular troops, the value of which I need scarcely enlarge upon.

Again, with stronger units the regimental institutions could be supported on a scale far superior to that which obtains under existing conditions; the work would also be lighter for all ranks, and the increased comfort that would result should render service in our Permanent Forces much more popular than it is at present.

I would point out that a few years ago (1895) the strength of the Rank and File at these Depots was 120, so that I only advocate a slight increase over the original establishment of the Regiment, the reduction of which has seriously impaired its efficiency.

The foregoing recommendations would entail an increase to the Permanent Force of about 18 Officers and 462 'other ranks,' and consequently clause 28 of the Militia Act would require to be amended so as to provide for the maintenance of Permanent Troops not exceeding 1,500 men; but I submit that the enormous increase in the wealth and responsibilities of the Dominion since the Act was passed more than warrant such an increase. In support of these recommendations I would urge that if they are adopted, the country would possess a force of highly trained troops, not only efficient for the purpose for which it is primarily maintained, but also *effective* in the event of war or internal disturbance, which at the existing establishments it cannot possibly be. If, therefore, it be impracticable to accept this increase in its entirety, I yet hope that the additional 'rank and file' may be granted as a first step towards placing our Permanent Troops on a more satisfactory basis.

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Provisional Schools.

While on the subject of Schools of Instruction, I feel it my duty to record my very decided condemnation of the so-called 'Provisional Schools' which have from time to time been held for the accommodation of Officers of City Corps. It stands to reason that $\frac{1}{2}$ hour's lecture, and say 1 hour's drill in a Drill Hall at night is no equivalent for the work a young Officer performs daily at one of the Depots, yet at the end of some weeks of this perfunctory study, these Officers are examined and granted certificates placing them on a professional equality with those who have passed the prescribed course at the schools. This appears to me to be as unjust to the latter Officers as it is detrimental to the general efficiency of the Militia. The 'Provisional School' may serve to qualify Provisional 2nd Lieutenants for permanent appointment, but they are useless for any other instructional purpose. It will be urged that a numerous class of young Militia Officers cannot spare the time to attend the Royal Schools of Military Instruction, and I can readily admit that to do so may, in many cases, entail some difficulty and possibly self-sacrifice; but the conditions were well known by these gentlemen when they accepted Commissions, and I submit that if they desire to enjoy the rank and status of Militia Officers, they must be prepared to thoroughly qualify themselves for their positions in the authorized manner, and not seek to gain their promotion by a 'short cut,' evading the most important parts of the regular Military School Course.

I believe the introduction of the Provisional Schools has had a prejudicial effect on the standard of efficiency attained by many young Militia Officers, and that in the best interest of the service it is inexpedient to continue to hold them. With this opinion I feel sure the majority of experienced Militia Officers will concur.

Examinations for Promotion.

In view of the much higher standard of efficiency which is now looked for in the Canadian Militia, I think the time has arrived to remodel the system upon which examinations for promotion have until now been conducted. The written tests that candidates are required to pass have varied in the different districts according to the idiosyncrasies and professional knowledge of the examiners who set the papers and award the marks, so that two Officers who are examined in different districts may gain equal marks and yet be very unequal as regards their ability or acquirements and qualifications. To remedy this inequality, I recommend that the examinations for promotion should in future be divided into two groups, as follows :—

I. Practical, comprising :

- (a.) Regimental duties.
- (b.) Drill and musketry.

This examination would be held after a course of training at the Schools, and the candidates tested and marked by the Board of Examiners.

II. Theoretical, comprising.

- (c.) Military Law, and discipline.
- (d.) Principles of Field Engineering, Elementary Military Topography, Tactics.
- (e.) Artillery. (For Artillery Officers only.)
- (f.) Army Service Corps Subjects. (For Officers of that Corps only.)

This examination should be held simultaneously on specified dates at convenient centres in the Dominion, the papers being set at Militia Head-Quarters, where the answers would be examined and the marks awarded. The papers, being distinguished by Index Numbers only, would ensure absolute impartiality, and a local Board of

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Officers would simply supervise the candidates while under examination and see that the regulations were strictly complied with.

Under such a system there would be no necessity to hold 'courses' at the Schools. Officers might be attached for instruction at any time from May to November. In lieu of a daily allowance, they should receive a fixed sum, not exceeding \$60, on passing their examination in (a) and (b). The normal period for attachment should be two months, but there need be no obligation for an Officer to remain the full period if able to satisfy the examiners earlier; neither should there be any objection to his remaining for longer, if accommodation was available.

No officer should, however, be permitted to be examined in 'Theoretical' (c), (d), (e), (f) until he had passed in 'Practical' (a), (b); but with a view to assist Officers in preparing themselves in the theoretical subjects, course of lectures would be given at all the Schools and Head-Quarters of Military Districts, attendance at which should be voluntary.

RETURNS.

Attached as Appendix A, is a Return of the Permanent Corps (non-commissioned officers and men), for the year ending 31st December, 1901, and as Appendix B, a Return of Certificates granted to officers, non-commissioned officers and men of the active militia, for the year ending 31st December, 1901.

RURAL CORPS.

(5.) My inspections of the Camps of Instruction in Military Districts No. 1, 2, 3 and 4, 5, 6 and 7 afforded me an opportunity of seeing a great number of the Rural Corps at their training, and enabled me to gauge their practical efficiency. As in my report last year, I can speak most favourably of the zeal, intelligence and excellent spirit of all ranks, and the administration, cleanliness, good order and discipline maintained in the Camps was highly creditable to all concerned. I must also specially commend the manner in which the Officers in Command and Staff Officers carried out their duties. I believe that, taken altogether, as much was accomplished in the way of training as existing conditions will permit of. In some Districts the results were rather better than in others, which was in a measure due to very adverse climatic conditions, which seriously interfered with tactical instruction, but I can only repeat that in nine working days it is absolutely impossible to impart more than the mere *rudiments* of a soldier's training. The time does not admit of any practice instruction in the more important branches of 'Field Training' or 'Musketry,' and consequently the net result is very far indeed from being satisfactory as regards the practical efficiency of the Canadian Militia. Officers and Men, I feel sure, do their very best, but I can only reiterate what I said in my last report, viz.: '*that the troops can never be made even fairly fit to take the field with the limited period of annual drill that they receive under existing arrangements.*' The difficulty is greatly accentuated by the fact that, as a rule, quite 60 per cent of the men in the ranks are raw recruits, who retard the progress of the remainder, for, as the strength of a chain is that of its weakest link, so is the instruction of large bodies of troops in advanced modern tactics hindered by the presence of a mass of practically untrained men in the ranks.

The wastage that takes place year after year in our Rural Corps is perhaps the most serious drawback against which the Militia of Canada has to contend, and it is impossible to acquit Captains of Companies of a considerable share of blame for this unfortunate state of affairs, for many of them seem to consider that so long as they can bring into Camp some approximation to their full establishment, the proportion of 'recruits' is of no consequence, neither do they make any efforts to enforce the provisions of the Militia Act against deserters. Apathy on the part of the Officers has a most direct influence upon the military spirit of the people who compose the rural

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companies, and I am quite confident that zealous exertion on the part of the Officers would go far to mitigate if it did not altogether remove this evil.

I am still of opinion, however, that the value of the Militiaman's services increases in direct ratio to the extent of his training, and that consequently it would be true economy to adopt a scale of pay graduated according to the number of trainings performed.

But even with the recruits reduced to the proper proportion (33 per cent), it is obvious that they should undergo some preliminary training before the bulk of their regiment assembles, so that they might be fit to take their places in the ranks with the older soldiers. Progressive instruction could then be given to all on the same lines, which at present is impracticable owing to the backwardness of the 1st year men.

In this connection it becomes of the utmost importance to decide what is the minimum number of days' training for the Active Militia that should offer a reasonable prospect of satisfactory results. To this matter I have given considerable attention, and the conclusion at which I have arrived is as follows:—

For trained men (i.e. 2nd and 3rd year) :

Arrival.	1 day.
Preliminary drill.	1 do
Company drill.	2 days.
Battalion drill.	2 do
Field training.	3 do
Musketry.	3 do
Brigade drill	2 do
Field manœuvres	2 do
Inspection.	1 day.
Sundays	3 days.
Departure	1 day.
	<hr/>
	21 days.

Preliminary training, 7 days, for recruits (1st year men).

I therefore recommend that the statutory drill period should be altered to give a maximum of 28 days.

It is obvious that such an extension of the training would entail a corresponding increase of expenditure, but not more I conceive than the important interests involved in the Defence of Canada would justify, and even demand. I venture to think that this is a question that has never yet been taken seriously, and the time seems ripe that the defence of the country should be dealt with as a practical matter and in a common sense way. It goes without saying that the expenditure on military defence, against troubles from without or from within, must be governed by fiscal considerations, or in other words by what the country can afford, but I would urge most earnestly that it is to the quality rather than to the quantity of our defenders that our efforts should be directed. 20,000 troops thoroughly well officered, trained and equipped would give the country a better return for the money expended on its military forces than 40,000 men on paper, who, under existing conditions, cannot be expected to be efficient for actual and real service in the field. If, therefore, the country is unable or unwilling to extend the annual training of the whole of the Active Militia, I would urge that the numbers trained annually be reduced so far as may be necessary to secure for those that *are* trained the time requisite to make them fairly efficient soldiers in discipline, field training and the use of their arms.

URBAN CORPS.

(6.) The city regiments that have come under my observation have all acquitted themselves with much credit. There are many very fine corps, well drilled, well equipped

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and of good physique, and so far as ceremonial exercises go, they leave little to be desired.

Where range facilities exist 'Musketry' receives much attention, resulting in a very fair average of efficiency in the use of the rifle. And I have observed that, as a rule, the Officers are more proficient on parade than in the Rural Regiments, but all are handicapped for want of instruction in the field and the experience that can only be gained in Camps of Instruction. There is no doubt that opportunities for such instruction are few, but I have no reason to doubt that the majority of the Officers and men of City Corps would gladly avail themselves of any facilities for more practical field training, and also of learning how to pitch their tents, cook and serve their rations and carry out the necessary duties of soldiers on field service.

I do not for one moment lose sight of the fact that as a rule Officers and men of City Corps put in many more hours of drill than the Act requires to count for drill pay, but unfortunately in the limited space of a drill hall it is impossible to impart anything beyond theoretical instruction on scouting, outpost duties, hasty entrenchments, the attack and defence of positions, tactical marches &c., &c., which are the more important portions of a soldier's training.

I therefore recommend that it should be prescribed by statute that to earn the full pay for annual drill all City Corps must pass 3 consecutive working days in Camp, and that when this is not done a deduction of 25 per cent should be made from the allowances for drill instruction.

GENERAL OBSERVATIONS.

(7.) The foregoing remarks apply generally to all arms, but I think it desirable to deal somewhat more in detail with the Cavalry and Artillery. It must be borne in mind that these branches of the service are not only much more costly to maintain than the Infantry, but the nature of their duties is more varied and demands longer and more arduous training, consequently what I have urged in general as to the absolute necessity of a longer and better training for the Militia as a whole, applies with even greater force to these highly important services.

Cavalry.—I have had an opportunity of seeing all the Cavalry units this year, with the exception of the 8th Hussars and the squadrons of Mounted Rifles recently raised in the west and at Charlottetown, P.E.I.

It is with much pleasure that I can speak with unreserved praise of the quality of the men, and as a general rule, of the horses. The equipment and arms were, on the whole, in a satisfactory condition, and the discipline and administration of these Corps appear to leave little to be desired. The Officers, and indeed all ranks, displayed commendable zeal and devotion to their duties, and did, I am convinced, all that could reasonably be expected in the limited time at their disposal, but I regret that it is impossible to report that *as Cavalry* they can be considered to any extent really efficient. A mounted soldier who is not fairly proficient in the use of the weapons with which he is armed and who is not an expert horseman, cannot be considered an efficient cavalryman, and unfortunately in none of these essentials do the bulk of our cavalry reach a standard higher than mediocrity, while some are of even less merit. As a rule the equitation is, to say the least, indifferent, for a great part of the Non-Commissioned Officers and men are unaccustomed to the saddle and require to employ both hands to manage their horses, consequently when mounted they are unable to use either the sword or carbine. For this state of affairs no blame can be attached to the Officers, Non-Commissioned Officers or men themselves, for it is obviously impossible in 9 working days to impart more than the mere rudiments of cavalry training, and it is only the zeal, hard work and intelligence of all ranks that enable our cavalry units to show results in elementary parade movements that must be considered remarkable, and that demonstrate clearly what excellent troops they could become under more favourable

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conditions. The defects I have pointed out, however, do not exist to the same extent in city units, in the ranks of which there appear many good horsemen.

There appears to be a general impression that the day of the cavalry soldier is passed, but such is by no means the opinion of the most up-to-date exponents of military science. Very far from it. It is generally recognized by the soundest students of modern military history that in future wars, Cavalry as an arm, will play a most important and probably decisive part, but this view is more applicable to the regular cavalry of standing armies than to the mounted troops maintained by the Dominion for the defence of Canadian territory, and a careful consideration of the conditions under which our cavalry must always be raised, and the nature of the duties they might be called upon to perform, lead me to the conclusion that it would be a wise measure to gradually convert many of the existing rural cavalry into mounted rifles under the squadron organization, which, upon my recommendation, has been recently adopted, and which I confidently hope will be found very suitable to our military system.

Artillery, Field and Garrison.—Of the Militia Field Batteries I can report very favourably, and I have no hesitation in saying that as regards efficiency this arm compares favourably with the other branches of the service. At the Deseronto Camp I had the opportunity of seeing a number of these Batteries at work, and in all respects I was well satisfied. Some of course were better than others, but all displayed a keen interest in their work that deserves high praise. I hope that encouragement for 'gun-layers' may be granted in the shape of badges and extra pay as is done with excellent results in the British Service.

In connection with the training of the Field Artillery I must place on record my appreciation of the work done at Deseronto by 'A' and 'B' Batteries of the Royal Canadian Field Artillery. These units, notwithstanding their being considerably below establishment, supply a model which the Militia Field Batteries emulate with considerable success, considering the very limited time available for tactical instruction and gun practice.

The same remarks apply to the Garrison Artillery. The detachments that I saw at the annual practice camp at the Island of Orleans were a fine workmanlike body of men and good representatives of their respective Corps. Where all were good it is perhaps invidious to make comparisons, but it would be unjust not to note the detachment sent by the 4th Regiment, which for physique and soldierlike bearing were a conspicuous and splendid sample of Canadian troops.

Since my last Annual Report, the special service Brigade Division Royal Canadian Artillery returned from active service in South Africa (8th January, 1901), and was thereupon disbanded.

The guns and equipment of 'C' (S.S.) Battery were handed over to the Imperial authorities in South Africa. Those of 'D' and 'E' Batteries were brought back to Canada and thoroughly overhauled and repaired at the Dominion Arsenal. When these batteries were despatched to South Africa, it was necessary to take the guns and equipment of the 5th Field Battery for the School of Instruction at Kingston, and on their return from active service this equipment was taken over by 'A' Battery, the equipment of which was incomplete owing to that of 'C' Battery being left in South Africa. The 5th Field Battery has therefore been without its equipment ever since. It is hoped that with the arrival of the new 12 pr. B.L. guns and stores, this Battery will be shortly re-equipped.

ARTILLERY PRACTICE.

(8.) *Gun Practice, Field Artillery.*—The following Batteries of Field Artillery carried out their gun practice at Deseronto Camp, those marked* having also performed their annual drill there :—

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'A'	Battery, R.C.F.A.
'B'	" "
1st	Field Battery, Quebec.
2nd	" Ottawa*
3rd	" Montreal.
4th	" Hamilton.*
5th	" Kingston.*
7th	" St. Catharines.*
8th	" Gananoque.*
9th	" Toronto.*
10th	" Woodstock.
11th	" Guelph.
12th	" Newcastle.
13th	" Winnipeg.
14th	" Durham.*
15th	" Guelph.

Gun Practice, Garrison Artillery.—This year it was practicable to carry out the gun practice of the Garrison Artillery at the Island of Orleans, with 40 pr. R.B.L. guns and 5" B.L. Howitzers.

The gun detachments of the following units were concentrated in camp on the island, viz. :

Nos. 1 and 2 Companies Royal Canadian Garrison Artillery.
 2nd 'Montreal' Regiment.
 3rd 'New Brunswick' Regiment.
 4th 'Prince Edward Island' Regiment.
 6th 'Quebec and Lévis' Regiment.
 Cobourg Company.

The results of the practices, Field and Garrison, which were on the whole satisfactory, are given in appendices C and D, respectively.

The 1st Regiment (Halifax) carried out its annual practice with 9" R.M.L. Guns at York Redoubt, Halifax, N.S., under the supervision of the Officer Commanding the Royal Artillery, who reports that it was satisfactory.

The 5th Regiment (British Columbia) also performed their practice under the Royal Garrison Artillery at Esquimalt with 6" B.L. guns and 13 pr. R.M.L. guns (movable armament). The Officer Commanding Royal Artillery reported that the result of the practice showed that more preliminary drill was required, and I consequently applied for the loan of a 6" B.L. gun and mountings to be placed in the Drill Hall at Victoria for instructional purposes, but I regret to say that one was not available. The O.C.R.A. also recommended some changes in the proportion of ammunition to be used for next year's practice, with a view to increased efficiency, and this you have been good enough to authorize.

Localities for Gun Practice.—It would be difficult to find a more suitable practice ground for Field Artillery than is furnished by Deseronto Camp, and it is much to be desired that the available area could be extended so as to provide space for the concentration of Cavalry and Mounted Rifles as well as Artillery.

Some definite agreement with the tenants should be entered into in order that the sites for the camps may be permanently fixed; sheds for the horses erected, at least for those of the R.C. Field Artillery, who are encamped there throughout the drill season, and arrangements made for a sufficient water supply. Those existing last year were most unsatisfactory, as, although the quality of the water supplied by the town was good, it was turbid, tepid and unpalatable by the time it reached the camp, where it was kept in barrels. The cost for providing pumps and suitable reservoirs would not exceed that expended on carting the water from the town.

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It is desirable that a plain but substantial building should be erected to provide a mess room for the officers, with also an office for the Officer Commanding, and I consider that a building for use as a hospital, with a small surgery and dispensary, would be desirable. Taking into consideration the cost of hospital and mess marquees, and wear and tear, permanent buildings would probably be in the end economical.

The present facilities for the practice of the Garrison Artillery are quite inadequate and place these units at a great disadvantage. The Battery at the Island of Orleans is cramped, and the range, being a water one and subject to the rise and fall of the tide, is most unsatisfactory and inconvenient, while the 40 pr. R.B.L. armament is quite obsolete. In my Report of last year (para. 10) I urged the provision of a suitable practice Battery on the River St. Lawrence in which modern guns could be mounted, and I again most earnestly invite attention to this very important matter. An excellent site has been selected, and I have plans prepared. I trust, therefore, that it may be possible to take this work in hand at the earliest possible date, as the 6" and 4.7 Q.F. guns ordered from England will be shortly delivered.

(9.) Attached as Appendix E, is a return showing the number of Officers, Men and Horses, of all arms, trained during 1901 at local headquarters and in district camps.

MOBILIZATION.

(10) The result of the Annual Mobilization for the Defence of the Garrisons of Halifax, N.S., and Esquimalt, B.C., were far from satisfactory as regards the attendance of the Militia Artillery Regiments allotted for these important duties. Of the 1st Division, 1st Regiment of Canadian Artillery (Halifax), only 62 per cent of its establishment were present, and the 5th Regiment (Victoria), B.C., only turned out 16 per cent. These results show a want of zeal that is most disappointing.

I am, however, pleased to report that the 2nd Division of the 1st Regiment (Halifax, N.S.), composed of Companies raised in Mahone Bay, Digby, Pictou and Yarmouth, acquitted itself with great credit, and was much praised by the Officer Commanding H. M. Troops and the Chief Umpire. The Infantry Regiments, viz.: 63rd and 66th, also turned out in fair strength (about 75 per cent), and all did very satisfactory work. The failure was the two above named Artillery Regiments, and it points to a very grave and serious situation. Canada has undertaken to aid in the defence of these important Imperial Garrisons and Naval Stations, but if the discipline of these Corps is so lax that the Officers, Non-Commissioned Officers and men cannot be got to attend for *one day* to learn the duties which form their *raison d'être* it appears imperative that some special legislation should be passed to make attendance obligatory, and to make it also obligatory upon employers to grant permission to the men to attend.

Hitherto, with a view to meet the convenience of employers and employed, these Annual Mobilizations have been fixed, by the Officer Commanding Imperial Troops, to take place on Statutory Holidays, and the day has been counted as a part of the 12 days training; but it appears that such an arrangement does not meet the case and other measures become necessary, for such failure to carry out our obligations reflects upon the military force of the country.

To avoid a recurrence of these difficulties, I recommend that the Corps detailed to take part in the defence of Halifax and Esquimalt should be required to perform one additional day's training annually, over and above that prescribed for the Militia generally,—such extra day to be for mobilization, and, by arrangement with the Imperial Authorities, to take place on some date other than a Statutory Holiday. The troops should of course be paid for the day and receive as subsistence a higher rate than is prescribed in Regulations and Orders, Para. 203, Part III., for it is obvious that the cost of providing food for one day is considerably higher than the per diem allowance for several consecutive days. The actual amount to be granted must naturally be governed by the prices ruling in the different localities at the time.

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It is impossible to overestimate the importance of these Artillery Units receiving practical instruction in peace in the special duties that would devolve upon them in time of war, for all arrangements for Fortress defence are made on the assumption that the Artillery who are to fight the guns are dependable troops and efficient gunners, and this they cannot possibly be if the opportunities for instruction are neglected, as has been the case at Halifax and Esquimalt this year.

I regret to be obliged to advert to this matter in such strong terms, but I feel that plain speaking is called for in the circumstances, and I should fail in my duty to the Government and the Country if I omitted to notice it in my official report.

MAGAZINE AND STORES.

(11) I have again to urge the necessity of providing magazine and store accommodation in Western Canada.

Decentralization is admittedly one of the ruling principles of up-to-date military administrations, but as yet in Canada we have made little advance in this direction, and as regards ammunition we have but one Arsenal and Reserve Magazine, and that so located at an extremity of the country, as to combine the maximum of inconvenience in peace and of difficulty and danger in time of war. I hold it to be absolutely essential to the efficient Defence of Canada that reserve magazines be without delay provided for the supply of the troops in Military Districts Nos. 1, 2, 3 and 4 and 10; and there is no military doubt that a second Arsenal for the manufacture of Ammunition is most necessary, the capacity of the existing Arsenal working at full power scarcely exceeding that required to meet the annual requirements of the troops.

As regards Stores for Equipment, the Chief Superintendent of Stores urged in his report last year the provision of new and more extensive buildings at Kingston and Toronto, and in supporting his views I would strongly recommend that the Tete-de-Pont Barracks at Kingston, which are very illsuited for the accommodation of troops, be converted into a Depot for Clothing, Equipment and Warlike Stores, other than Ammunition, for which the existing buildings with slight alterations would be very suitable. If this were done new Barracks could be provided for the Field Artillery School, which I consider to be most necessary, as those now in occupation by the troops are deficient of most of the requirements of a modern Barracks, and to bring them up to a reasonable degree of comfort and convenience would, even if practicable, cost so much as to render the construction of a modern and thoroughly sanitary Barrack an economy in the end, and moreover, it would, I feel confident, make service in the Field Artillery much more popular.

While on this subject it is my duty to point out the need of 'Mobilization Stores' at the Head-Quarters of Military Districts, in which should be held a complete Equipment for each unit in the District, sufficient to enable it to take the field. These Stores should be held in charge by the D. O. C., and without such a distribution of Warlike Stores and a thorough decentralization of the Store Branch, rapid and successful mobilization for war is an absolute impossibility.

No matter how well trained may be the personnel of an Army its practical efficiency for war must be measured by the rapidity with which it can be brought to a war footing and placed in the Field as a perfect fighting machine. This is simply a matter of administration on up-to-date lines in time of peace, and the first step necessary to this end is to locate the necessary *matériel* where it is required for issue to the troops, and thus avoid a hurried distribution with, as a rule, confusion and miscarriage, should the emergency arise.

I venture to hope that the great importance of this feature in military administration may commend it to earnest consideration, and that the provision of a Western Reserve Magazine, and, if possible, a secondary Arsenal may be provided at the earliest practicable date.

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TOUR OF THEIR ROYAL HIGHNESSES THE DUKE AND DUCHESS OF CORNWALL AND YORK.

(12) The most interesting military occurrence of the past year was the large concentration of troops in connection with the tour in Canada of Their Royal Highnesses the Duke and Duchess of Cornwall and York, and the Reviews held before the Royal Visitors at Quebec, Toronto and Halifax, N.S. The numbers present on parade on each of these occasions are given in detail in Appendices F, G and H, respectively, and it may not be out of place to mention here that the Review at the Exhibition Grounds, Toronto, on the 11th October, was, I believe, the strongest concentration of Canadian Troops that has ever been seen in the Dominion.

It must be a source of the greatest satisfaction to the people of Canada to know that His Royal Highness expressed his appreciation of the soldierlike bearing of all the troops that I had the honour to command on these historic occasions.

It was no light undertaking to bring together some 20,000 men, and I must bear testimony to the successful manner in which all the details of organization, transport, quartering and subsistence of the troops were dealt with in the Adjutant General's and Quartermaster General's offices at Head-Quarters, as well as to the efficient manner in which the duties of the Staff were carried out by the Divisional and Brigade Commanders and their Staff Officers.

Although the Stores Department is not under my command, I may be permitted here to express my satisfaction at the very prompt and successful manner in which all the requirements of the Troops, in respect to Clothing and Equipment, were dealt with by the Chief Superintendent of Stores and the Officers of his Department.

The conduct of the troops from first to last was deserving of all the praise I can give it, and when it is borne in mind that all ranks had to make considerable sacrifices in time and often in money to appear in the ranks of their Corps, I consider that the fact of most of the Units parading in nearly full strength, is a high testimony to their loyalty and patriotism.

So far I have only alluded to those Corps which took part in the Reviews held in Their Royal Highnesses honour, but they were by no means the only Militia Corps that took an important part in the Royal Receptions, for at every point of the Dominion visited by the Duke and Duchess, Royal and Vice Regal Guards and Mounted Escorts and Salutes were furnished by the Militia of the localities, under the orders of the District Officers Commanding, and I am proud and pleased to report that I received officially the approbation of His Royal Highness and of His Excellency the Governor General at the punctual and efficient manner in which all these duties were carried out.

I indulge in the hope that the sight of so many troops 'in being' may bring home to the people of the Dominion that they possess the nucleus of an Army capable of great development and well deserving of national encouragement, and that it may lead to the Militia, and with it the defence of the Country, being taken very seriously and as a real and most potent factor in maintaining and solidifying Canada's important position in the British Empire.

INSTRUCTIONAL CAMPS.

(13.) The only change in the location of the camps this seasons was the substitution of Three Rivers for Laprairie, rendered necessary by the prevalence of small-pox at the latter place. The camp proved most suitable in every respect. The situation is convenient, with an abundant supply of excellent water, and permission to use the Exhibition Buildings, kindly granted by the Mayor and Corporation, who also lighted the approaches to the camp by electricity, added greatly to the comfort of the mounted troops. There is also a convenient and very good rifle range, which only needs the erection of a stop butt to meet all the requirements of the Musketry Regulations.

The decision to encamp Nos. 7 and 8 Infantry Brigades at Three Rivers having been arrived at late in the season, time did not admit of quite sufficient ground being

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cleared for manœuvering purposes, but if a more extended area is cleared by the local authorities, I consider that Three Rivers possesses all the requirements of an excellent location for an instructional camp.

Following a suggestion that I offered in my report last year, units were provided with rough lumber for the construction of dinner tables and forms, and I think that this concession added considerably to the comfort of the men. Many corps provided mess tents for their companies, and I would recommend that in future where such cannot be provided by the Store Department, an allowance might be granted to corps to aid them in making regimental arrangements for supplying mess tents to their men.

As regards cooking, I have nothing to add to my report of last year (Appendix A, Annual Report, 1900) respecting the employment of men skilled in cooking for lumber camps as 'Master Cooks.' The cooking arrangements of a Battalion in camp at Lévis in which these men were engaged was a conspicuous confirmation of my previous opinion. I would add that a portable cooking stove made by the McClary Manufacturing Co., of London, Ont., used by most of the corps in No. 1 District, is very satisfactory, and appears very suitable for the use in camps.

I would again very strongly urge that rough shelter should be provided for the horses of mounted units, for there is no doubt that many casualties among horses, resulting in heavy claims for compensation, are due to exposure. This, of course, is inevitable in war, alike for men and horses, but it is quite unnecessary in peace, being in no sense conducive to efficiency and only causing owners to be reluctant to take their horses into camp. I trust that in the estimates for 1902-3 provision may be made for these constructions.

RATIONS, MESSING AND CANTEENS.

(14.) The rations supplied at the annual camps and concentrations were ample and of very good quality, but it has been suggested that some rearrangement of the proportions might prove acceptable to the troops, and I therefore instituted careful inquiries on this subject through the Officers Commanding Districts, with a view to ascertain in what direction changes, if any, should be made. The result proved that there was a striking want of unanimity on this matter, not only as to whether the present scale should be maintained but also in respect to the nature of the readjustment desired; in fact scarcely any two corps held the same views, the balance of opinion being, however, in favour of adhering to the existing scale of issues.

At the concentrations for the Royal Reviews the City corps, with very few exceptions, proved unequal to cooking and serving their own food, and elected to draw an allowance in lieu of rations, making local contracts for the supply of their meals, which I understand proved in many instances unsatisfactory, as was to be expected. The country regiments, on the other hand, for the most part drew their rations and fared much better than their comrades from the towns, which I think shows very clearly how necessary it is that city units should receive more practical training in the every-day routine and duties of a soldier's life.

Great difference of opinion exists as to the sale of intoxicants in military canteens and strong efforts have been made to prove that the regulations prohibiting such sale have been, in some cases, evaded. I made careful inquiries as regards these assertions, with the result that no proof has been submitted in support of them, and although I am not prepared to say that such irregularities may not have occasionally occurred, they must have been, in my opinion, the exception rather than the rule.

I would not on any account permit the sale of spirits in the canteens during annual drill, but I must here most strongly protest against a system that forces a soldier, if he needs a glass of beer, to resort to the saloons and drinking shops of the nearest town where there is no control over either the quality, nature, or quantity of the liquor supplied to him. The effect of this regulation is to largely increase the amount of drunkenness in camp, and it is easy to show why this is so. In a military

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canteen all liquor has to be consumed on the premises and, if proper supervision is exercised, no man should be served with more than is good for him. But what happens under the existing system of prohibition? The man who would have been contented with his glass of ale or lager beer had he been able to procure it in camp, has to walk some distance to get his drink, probably takes whiskey instead of malt liquor, and very often returns to camp with a bottle of bad whiskey under his coat which he takes to his tent and proceeds to make his comrades intoxicated.

I contend that it is a serious evil to drive our men into the temptation of the city liquor bars, rather than let them buy a glass of wholesome beer in their own camp, and I trust that this incentive to intemperance may be removed from the Militia Regulations.

MUSKETRY.

(15.) Perhaps the most important military features of the year 1901 have been the establishment of the Canadian School of Musketry which, on my recommendation, you were pleased to approve of, and the formation of Civilian and Military Clubs throughout the Dominion.

The School of Musketry opened at Rockcliffe range for its first instructional class on July 2, the second class opened on September 2, and both lasted for a period of six weeks.

Thirty-four Officers and Non-Commissioned Officers attended these courses, and of these 20 obtained 'extra' and 14 'ordinary' certificates, a result that I consider very satisfactory, and great credit is due to Lieut.-Colonel R. Cartwright, C.M.G., the Commandant, who devised and carried out the course of instruction under serious disadvantages for want of properly trained assistants. Indeed the success that attended the first year's operations of the School are entirely due to the zeal and energy displayed by the Commandant. I trust that in the coming year he may enter upon the season's work with an adequate staff of highly trained instructors.

There appears to be a very false, but unfortunately a very widespread impression, that this School has been established for instruction *in shooting*, but such is by no means the case. Its object is to train Officers and Non-Commissioned Officers as *Instructors*, and thus fit them to train the Non-Commissioned Officers and Men of their respective units, for few people realize the terrible waste of ammunition that results from taking men out to fire on the Ranges without preliminary training in the use and handling of their rifles. Up to the present time such training has been impracticable for want of properly qualified teachers.

Experience has proved over and over again that a few days careful instruction from an expert will do more to convert a novice into a good rifle shot than the expenditure of hundreds of rounds of ammunition without such help, and I therefore feel confident that if duly encouraged and supported, the Canadian School of Musketry at Rockcliffe will prove a most highly important factor in raising the standard of Musketry practice throughout the Militia of Canada.

Since the establishment of Rifle Clubs was authorized by Special G.O. of April 15, 1901, there have been formed :

64 Civilian Clubs, with 3,200 members,

31 Military Clubs, with 1,860 members,

or a total of 95 Clubs and 5,060 members, a result which, I think, must be considered highly satisfactory in such a short space of time, and proves the movement to be a very popular one. I have approved of and issued new and very comprehensive Regulations for Rifle Clubs, published in both English and French, which I hope will be of considerable service in spreading a more general knowledge of the proper use of the Rifle. Musketry Regulations for the Canadian Militia have also been prepared embodying all the latest principles, and thoroughly up-to-date, which should ensure practice on the Ranges being conducted with the best results.

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A new 'Gallery Cartridge,' suggested by Lt.-Colonel Cartwright and most ably worked out and perfected by Major Gaudet, R.C.A., Superintendent of the Dominion Arsenal, has been introduced. This cartridge supersedes the use of the 'Morris Tube,' to which it is very superior, as it can be used with the ordinary rifle, and thus every man can practice with his own, and moreover, being very much cheaper, a much larger allowance of this ammunition can be made, and I confidently expect that it will prove of the greatest benefit to the service.

The following is a list of the Rifle Ranges completed in 1901 :—

St. John, N.B.	Halifax, N.S.
Three Rivers, Que.	Rossland, B.C.
Point Lévis, Que.	Revelstoke, B.C.
London, Ont.	Kaslo, B.C.
Longue Point, Que.	Kamloops, B.C.
Clover Point, B.C.	

In addition to the above, Rifle Ranges are under construction at :

Sherbrooke, Que.	Fredericton, N.B.
Brockville, Ont.	Lunenburg, N.S.

MEDICAL SERVICES.

Canadian Army Medical Staff :

(16.) The establishment of the various ranks of the Canadian Army Medical Staff was completed during the year. All the Officers have now qualified for their respective ranks, as required by G.O. 19 of 1900. In addition to these, there is now a list of twenty-two supernumerary Second Lieutenants, thirteen of whom have already qualified for promotion to the establishment as vacancies occur. Forty-five of the Officers of the Canadian Army Medical Staff are doing duty with units of the Medical Corps.

Nine Courses of Instruction have been held in Garrison or District Camps, in which thirty-eight Officers of the Staff or Regimental Medical Services have qualified for their Commissions.

Canadian Army Medical Corps :

The following Units of the Canadian Army Medical Corps were organized, recruited, and executed their first training during the Drill Season of 1901, viz. :

Bearer Companies :

No. 6 Company,	London, Ont.,	at No. 1 Div. Camp.
" 7 "	Hamilton, Ont.,	" "
" 8 "	St. John, N.B.,	at 12th Infantry Brigade Camp.

Field Hospitals :

No. 3 Company,	Montreal,	at No. 5 Div. Camp.
" 6 "	Sarnia	" 1 "
" 7 "	Toronto	" 1 "
" 8 "	Charlottetown, P.E.I.,	at 12th Infantry Brigade Camp.

All the older Units, Nos. 1 to 5, inclusive, held their second Annual Training during the year, and the Director General of Medical Services reports that they all showed increased efficiency, especially commending No. 4 Bearer Company and No. 4 Field Hospital at Niagara Camp, and No. 3 Bearer Company at Three Rivers.

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At the Royal Reviews the Medical Units appeared to great advantage, and their behaviour and general turn-out are deserving of very high praise.

Regimental Medical Service.—The Director General reports that this most important branch of his Department, the first line of medical aid in action, has not yet reached the development and efficiency desirable.

This he attributes on the one hand to a certain lack of modern training and some indifference on the part of Regimental Medical Officers, and on the other hand to want of support and co-operation by Commanding Officers and Captains of Companies. Orders will be issued that I hope will remove any existing obstructiveness by these latter Officers.

Nursing Service.—As provided for in General Order 62 of 1899, para. 23, a Militia Nursing Service has been organized this year, and eight of the senior nurses having seen service in South Africa, they will form a very reliable nucleus for this branch, which I hope may be given an opportunity to further develop during 1902.

Appointments.—Your acceptance of the Honorary Colonelcy of the Canadian Army Medical Corps has been a source of much gratification to all ranks, and will contribute in no small degree to stimulate *esprit de corps* and promote zeal and efficiency.

At the close of the year His Majesty's Government signified its acceptance of a Canadian Medical Unit for service in South Africa, and the formation of a Special Service Field Hospital was at once taken in hand, and was proceeding at the end of December.

I consider that the Canadian Medical Services are in a condition of high and very creditable efficiency.

ROYAL MILITARY COLLEGE.

(17.) I attach, (Appendix J), the report of the Commandant of the Royal Military College, Kingston, and am pleased to report that this institution maintains its high reputation, and, from personal inspection, that the administration is generally quite satisfactory, while the drill and physical training of the Gentlemen Cadets leaves nothing to be desired.

The Commandant comments adversely upon the result of the riding instruction, but the conditions are very unfavourable. Horses and saddlery have to be provided by the Royal Canadian Field Artillery in addition to its ordinary duties, entailing double work upon both men and horses, which severely taxes the Batteries, especially when they are much below the establishment, and in view of the fact that the College furnishes no Officers for the Canadian Forces, I can see no object in continuing instruction in equitation, which takes up time that might be devoted to other subjects, and I consider that any requirement of the Canadian Service would be quite as well met if graduates of the College who accept Commissions in either the Permanent Force or the Active Militia were, on leaving the College, attached to the Royal Canadian Dragoons at Toronto for a course of instruction in equitation.

It is a matter for great regret that this admirable institution, established for the express purpose of securing for the Canadian Militia a supply of well trained and capable Officers, entirely fails to attain this object. What brought about this state of things it is impossible to say, but one thing seems clear, that in the period spent at the College, the students do not imbibe any soldierly ambition or acquire a taste for Military employment, and it is sad to see, year after year, young gentlemen who have received such an excellent military education at great cost to the state, holding aloof from the service of their Country. With a view to secure in some measure a return for the cost to Canada of keeping up a Military College, I suggest that before a young gentleman is admitted as a student, he and his parents or guardians should give a joint bond that on graduation he will serve for a specific number of years as a Com-

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missioned Officer in a corps of the Active Militia, and I consider that some regulation of this nature should be adopted, if in the future the College is to justify its existence as a Military Institution.

It is a matter for great satisfaction that the health and conduct of the gentlemen Cadets have been very good, and the very fine gymnastic display given at the Military Tournament in Toronto last summer was an evidence of the splendid physical training given at the College.

The Reconnaissance Survey executed by the gentlemen Cadets under the supervision of Major Van Straubenzee was a work of considerable merit, and I concur with the Commandant in considering the reports in connection with it of much strategical value.

An electrical plant for lighting the College has been installed and is a measure that will greatly add to the comfort and convenience of the institution. The new hospital also will, when completed, be a very valuable addition to the establishment. When practicable, I shall be glad to see a covered skating rink provided as a means of recreation and exercise for the gentlemen Cadets during the winter.

ESTABLISHMENTS.

(18.) The various changes in the establishments of existing Units and the new Corps authorized during the year, are as hereunder :—

PERMANENT CORPS.

Royal Canadian Dragoons :

(a.) Strength reduced by 2 officers, 8 non-commissioned officers, 42 rank and file, and 23 horses.

Canadian Mounted Rifles :

(b.) New Unit, stationed at Winnipeg, consisting of 6 officers, 12 non-commissioned officers, 42 rank and file, and 41 horses.

Royal Canadian Artillery (Field Division) :

(c.) Increased by 1 Battery Sergeant-Major and 1 Orderly Room Clerk, and reduced by 1 Veterinary Officer and 1 Hospital Sergeant.

OTHER CORPS.

Cavalry :

(a.) The 5th Dragoons and 6th Hussars amalgamated.

(b.) All Cavalry Regiments given a uniform establishment as follows :—

Four squadrons, 30 officers, 30 staff sergeants and sergeants, 300 rank and file, 324 horses.

(c.) The appointment of 2nd Lieutenant abolished and the number of Lieutenants increased accordingly.

Artillery :

(a.) Field—An additional Veterinary Lieutenant authorized for the 1st Brigade, and 2 additional Veterinary Lieutenants for the 2nd Brigade, making a Veterinary Officer for each Battery.

(b.) Garrison—The appointment of 2nd Lieutenant abolished and the number of Lieutenants increased accordingly.

(c.) An Adjutant authorized for the 2nd Division, 1st "Halifax" Regiment.

(d.) 3 officers' horses authorized for each Regiment.

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Mounted Rifles :

(a.) The authorized establishment of a Squadron for all Mounted Rifles (Permanent Corps excepted) to be as follows :—

Captain, 1 ; Lieutenants, 2 ; Sergeants, 6 ; rank and file, 45 ; horses, 53.

(b.) The Manitoba and North-West Mounted Rifles changed to 8 Independent Squadrons of the above establishment, the whole to form a Field Division, with a Staff of one Lieut.-Colonel and one Second in Command.

(c.) The Mounted Rifles at Toronto to comprise two Squadrons of the above strength, with a Major in Command.

Infantry :

(a.) A new Regiment of 8 Companies to be known as the "4th Regiment" authorized, to consist of four companies from the 81st Regiment, and four companies to be raised.

(b.) The 10th Regiment changed from 10 to 8 companies, with 31 officers, 38 staff sergeants and sergeants, 401 rank and file, 470 all ranks.

(c.) The 21st Essex Fusiliers converted from a Rural to a City Corps of 6 companies.

(d.) The 34th Regiment increased from 7 to 8 companies.

(e.) The 37th Regiment increased from 7 to 8 companies.

(f.) The 52nd Regiment amalgamated with the 79th Regiment, the new Regiment to be known as the "79th Shefford and Brome Regiment of Infantry."

(g.) The 61st Regiment increased to 8 companies by the transfer of Companies 1, 3 and 4 from the 88th Regiment.

(h.) The 64th Regiment increased by four companies on amalgamation with the 76th Regiment, the new Regiment to be known as the "64th Regiment of Rifles Voltigeurs de Chateauguay."

(i.) The 67th Regiment reduced from 9 to 8 companies by the transfer of a company to the 71st Regiment.

(j.) The 71st Regiment increased to 8 companies by the transfer of 1 company from the 67th Regiment.

(k.) The 76th Regiment amalgamated with the 64th Regiment.

(l.) The 77th Regiment increased by 2 new companies making it an 8 company Regiment.

(m.) The 81st Regiment disbanded; companies 1, 2, 4 and 5 to form part of the new 4th Regiment, and companies 3 and 6 disbanded.

(n.) The 83rd Regiment increased from 6 to 8 companies by the transfer of 2 companies from the 86th Regiment.

(o.) The 85th Regiment increased from 6 to 8 companies.

(p.) The 86th Regiment converted to a City Corps of 4 companies.

(q.) The 87th Regiment increased from 6 to 8 companies by 2 companies from the 88th Regiment.

(r.) The 88th Regiment disbanded ; companies 1, 3 and 4 transferred to the 61st Regiment, 2 and 6 to the 87th Regiment and 5 disbanded.

Total Changes Made.—These changes made a net increase in the Regimental establishments over those of 1900-1 of 959 Officers and men, and 658 horses.

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APPOINTMENTS AND CHANGES IN THE STAFF.

(19) The following appointments to and changes in the Staff of the Canadian Militia took place during the year :—

APPOINTMENTS.

1. Major H. A. Panet, R.C.A., to be Staff Adjutant, R.M.C., vice Lieut-Colonel McGill. 8th January, 1901.

2. Lieut.-Colonel V. B. Rivers, R.C.A., to be Intelligence Staff Officer at Head-Quarters (Q.M.G.'s Dept.). 6th February, 1901.

3. Lieut.-Colonel R. N. R. Reade, Shropshire Light Infantry, to be Commandant Royal Military College. 15th February, 1901.

4. Lieut.-Colonel A. Roy, D.O.C. No. 6 M.D. to command, temporarily, Military District No. 5. 1st April, 1901.

5. Lieut.-Colonel R. Cartwright, A.A.G., to be Inspector of Musketry, with the status of A.A.G. at Head-Quarters. 15th April, 1901.

Lieut.-Colonel Cartwright to be Commandant of the School of Musketry. 1st July, 1901.

6. Lieut.-Colonel and Brevet Colonel L. Buchan, C.M.G., Commanding R.C.R., to be Assistant Inspector of Infantry. 30th May, 1901.

7. Major W. J. Stewart, R.O., to be Assistant District Staff Adjutant, Military District No. 5. 12th June, 1901.

8. Colonel W. H. Cotton, from the appointment of A.A.G.A., to be Quartermaster General. 1st July, 1901.

9. Lieut.-Colonel B. H. Vidal, from the Command of Military District No. 8, to be Deputy Adjutant General. 1st July, 1901.

10. Honorary-Major J. Lyons Biggar, from the 15th Regiment, to be Deputy Assistant Adjutant General for Army Service Corps Duties, with the rank of Major. 1st July, 1901.

Major J. Lyons Biggar, from the appointment of D.A.A.G., to be Assistant Quartermaster General. 1st December, 1901.

11. Lieut.-Colonel W. M. Humphrey, R.O., to be District Staff Adjutant, Military District No. 9. 1st July, 1901.

TRANSFERS.

Lieut.-Colonel J. G. Holmes, from the command of No. 1 Military District, to the command of No. 11 District. 1st April, 1901.

Lieut.-Colonel J. Peters, from the command of No. 11 Military District (temporarily Commanding Military District No. 5), to command No. 1 Military District. 1st April, 1901.

RESIGNATION.

Colonel H. Foster, Quartermaster General, having accepted temporary employment in the Intelligence Department, War Office, vacated the appointment of Quartermaster General. 30th April, 1901.

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SOUTH AFRICAN CONTINGENTS.

(20) Her late Majesty's Government having signified their acceptance of 1,000 men from Canada to serve in the South African Constabulary, the same was notified for general information in Militia Order No. 12 of the 15th January, 1901.

Candidates for enlistment were required to be not under 20 nor over 35 years of age, good riders, good shots, single, strictly sober, medically fit and recommended by two persons in responsible positions. The term of engagement was for 3 years and the rates of pay offered were very liberal, ranging from \$1.21 for a 3rd class trooper up to \$3.65 per diem for a superintending Warrant Officer.

On the 23rd January, in Militia Order No. 19, it was notified that 10 commissions as Captains and 15 Commissions as Lieutenants would be granted on the recommendation of His Excellency the Governor General, and on the 8th February, in Militia Order No. 32, recruiting was authorized and orders issued that all men recruited at or to the west of Ottawa would mobilize there on Friday the 8th March, and all men enlisted at or east of Montreal would mobilize at Halifax, N.S. on Tuesday the 12th March.

By the prescribed dates the force was assembled at its mobilization stations and it is not too much to say that double the required number could with ease have been enrolled. The clothing and equipment of this corps was provided by the Imperial Government on its arrival in South Africa where the final attestation of the men was executed, but sufficient to meet their necessities on the voyage was supplied here most promptly through the Chief Superintendent of Stores. The Ottawa detachment left for Halifax, N.S., on the 26th of March, where the whole Corps embarked in the ss. *Montfort* and sailed for South Africa on the 28th March, 1901.

This contingent was a very fine body of young men, of good physique and very keen for active service. Their conduct while at Ottawa was generally very good and they will unquestionably render efficient service in the field. It is regretted that being an Imperial force no official record of its operations have been received by me and consequently I am not in a position to report upon the distribution of the force after its arrival in South Africa, nor can I give any details of the good work that I feel confident it has accomplished.

The following is a list of the Commissions granted on the recommendation of His Excellency the Governor General:—

Captains :

Captain H. E. Burstall, R.C.A.
 Major C. C. Bennett, 6th Rifles.
 Captain F. W. L. Moore, 4th Regt. C.A.
 " W. T. Lawless, The G.G.F.G.
 " T. O. Critchley, 3rd Bn. R.C.R.
 " A. H. Powell, P.L.D.G.
 Inspector W. H. Scarth, N.W.M.P.
 Sergt. Major E. Reading, R.C.D.
 Captain H. R. Pousette, 26th Regt.
 Lieutenant G. S. Beer, R.M.R.
 Lieut. A. E. Swift, 8th Royal Rifles.
 W. L. McGivern, late R.C.R.

Lieutenants :

Lieut. J. C. Oland, 63rd Regt.
 Lieut. A. B. Irvine, 90th Regt.
 C. P. Ermatinger, C.M.R.
 D. A. O'Meara, 8th Regt.

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J. French, N.W.M.P.
 W. D. McCarthy, late 2nd (S.S.) Bn. R.C.R.
 Vety. Capt. W. J. Morgan, 5th Field Battery.
 Capt. J. F. Foulkes, 5th Regt. C.A.
 H. A. C. Machin, late 2nd (S.S.) Bn. R.C.R.
 G. Hampson, 5th R.S.
 R. B. Eaton, (Truro, N.S.)
 Cadet K. C. Folger, late R.M.C.
 R. R. Thompson, late 2nd (S.S.) Bn. R.C.R.
 F. W. Burritt, late R.C.D.
 Cadet C. R. C. Willetts, R.M.C.
 F. T. St. George.
 J. R. I. Atwater, late 2nd (S.S.) Bn. R.C.R.
 Lieut. G. R. Lightbound, 3rd Regt.

2nd Regiment Canadian Mounted Rifles and 10th Canadian Field Hospital, A.M.C.

Again, at the close of the year, His Majesty's Imperial Government signified their acceptance of further Canadian aid in South Africa, and in Militia Order No. 271, of 29th November, 1901, authority was issued to enlist a regiment of Imperial Yeomanry to be known as the 2nd Regiment Canadian Mounted Rifles, consisting of 4 squadrons with a total strength of 26 Officers, 31 Non-Commissioned Officers and 540 Rank and File ; subsequently (M.O. No. 285 of 16th December), two additional squadrons were authorized, and later in M.O. 2, 1902 the services of a Medical Unit and 8 nursing sisters were accepted, and instructions issued to raise a Field Hospital complete with its transport and horses.

By the 31st December the Mounted Rifles had mobilized at Halifax and their horses provided, and the organization and equipping of this unit is now proceeding. I purpose submitting later a report giving full details respecting the organization, personnel and equipment of these units and their departure for the seat of war, with such details of their services in the field as may be available.

As in the case of the other contingents the applications for enlistment were far more numerous than could possibly be accepted, allowing a large margin for selection, which was strictly and very satisfactorily carried out, priority being given to men who had previously served in South Africa, of which there were a considerable number, and as a result, I believe that rarely if ever has a finer body of men been enrolled for His Majesty's Service and the country may with confidence look to the 2nd Regiment Canadian Mounted Rifles and the 10th Canadian Field Hospital to worthily uphold the reputation and add to the laurels gained by their predecessors.

ORGANIZATION OF RESERVES.

(21) In the existing organization of the Military Forces of the Dominion two defects are very conspicuous ; they are :

(1.) That with the exception of the more recently raised units, viz., Field Companies of Engineers, Companies of the Army Service Corps and the Field Hospitals and Bearer Companies, there are no war establishments prescribed for the fighting troops.

(2.) That even were such establishments prescribed, no practical machinery exists for raising Regiments, Batteries and Battalions from a peace to a war footing.

The first of these is a comparatively simple matter to be dealt with by Regulations which I purpose to submit, but the second is a very much more important question, demanding most serious consideration and possibly special legislation. The units of the Active Militia as they now stand in the Establishment Lists cannot be taken

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seriously in any scheme for the Defence of Canadian Territory. Our Regiments of 8 Companies number 306 Rank and File, equivalent on a war footing to a little over 2 companies, and when we come down to the so-called 'Regiments' of 4 companies they practically only amount to 1 company for fighting purposes ; thus our existing system only provides us with the nuclei of armed forces that must be capable of expansion to render them efficient units in war. The problem to be faced is how to devise a practical scheme for rapidly raising our units to whatever may be prescribed as their war strength, with the least possible disturbance of existing conditions, but one thing is very clear that sooner or later it has to be done, if our Militia is to be regarded as a truly efficient defence for Canadian soil.

It would not be possible here to enter into all the details that would require to be provided for in the organization of Reserves for the Active Militia, but the following is a brief statement of the lines upon which I believe it would be practicable to proceed under the powers conferred by the Militia Act.

(a.) That for every Squadron, Battery or Company of the Active Militia there be raised from the first and second classes of the male population (Sec. II) by ballot (Sec. 12, (c) an affiliated unit of 50 men.

(b.) That in time of peace such unit need not be called out for training, but each man must be a duly registered member of a Civilian Rifle Club and must produce, when called upon, a Certificate that he has fired his Annual Allowance of Ammunition, under some penalty to be legally prescribed.

(c.) That the Captain of the Active Unit shall be '*ipso facto*' the Commanding Officer of the Reserve Unit.

(d.) That every man enrolled in a Reserve Unit shall present himself at Company Head-Quarters to be mustered once a year on a date to be specified by the D.O.C.

(e.) That reasonable travelling allowances for attending muster should be granted to any Reservist residing beyond 6 miles from Company Head-Quarters.

(f.) That N.C. Officers and men who have served 3 years or upwards in the Active Militia be encouraged to voluntarily join the Reserve of their own unit, receiving a small gratuity according to their rank on presenting themselves for annual muster.

The foregoing remarks apply more especially to Rural Corps which are organized on the Squadron or Company basis, but a similar system would, with perhaps some modification, apply to urban units which are organized Regimentally. The question of Reserves, so far as *personal* is concerned, presents no real difficulty, for the men are there and can be converted into fairly efficient troops in a few weeks. But it is quite a different matter when we come to deal with *matériel*. Guns, Rifles, Saddlery, Harness, Equipment, Clothing, Tents and Ammunition for the War Establishments, &c., cannot be improvised at short notice, and I venture to urge that this is a matter of national importance deserving of the most serious and careful consideration. No people are free from the sacred obligation to defend their own land from foreign aggression, and I contend that this can only be effectually and economically done by a business-like and gradual preparation in time of peace.

The expenditure on defence should be looked upon as the Annual premium on a Policy of National Insurance, and as money well laid out in securing the independence and prosperity that can only be assured by 'the strong man armed.'

DRILL HALLS AND ARMOURIES.

(22) The following buildings have been completed during the year 1901, viz. :—

DRILL HALLS.

Windsor, Ont.
Dundas, Ont.

Kingston, Ont.
Vancouver, B.C.

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CENTRAL ARMOURIES.

Aurora, Ont.
Barrie, Ont.
Charlottetown, P.E.I.
Chatham, Ont.
Fredericton, N.B.
Galt, Ont.
Kentville, N.S.
Lachute, P.Q.
Montreal, P.Q.
Newcastle, N.B.
Port Hope, Ont.

Prescott, Ont.
St. John, N.B.
Springhill, N.S.
Sarnia, Ont.
St. Anns, Ont.
Toronto, Ont.
Three Rivers, P.Q.
Waterloo, P.Q.
York, Ont.
Whitby, Ont.

In addition to the above there were under construction, a drill hall at St. Catharines, Ont., Central Armouries at Baddeck, N.S., Middleton, N.S., and Sussex, N.B., also Company Armouries in British Columbia, at Nelson, Kaslo, Kamloops and Revelstoke, and I am given to understand that drill halls at Woodstock, N.B., and London, Ont., will shortly be taken in hand.

I have given much thought to the question of whether rural corps should be provided with central armouries, and having consulted all the District Officers Commanding I have come to the conclusion that the 'Company Armoury' is more suited to the conditions under which our rural militia is organized.

It is of course obvious that arms and equipment are better cared for, as a rule, in a Central Armoury, but this is, I conceive, the only important argument in its favour. On the other hand, to deprive the Captains of their arms tends to lessen their interest in their companies, and deprives the N. C. Officers and men of any opportunity of drilling or rifle shooting in the intervals between the annual trainings. This results in a loss of military spirit in the country hamlets and districts, for it can scarcely be expected that people will take much pride or interest in their local company which they never see. I have also observed that where rural regiments have been provided with Central Armouries, there is a decided leaning on the part of commanding officers to gradually convert their commands into city corps, to the very great detriment of the service, for, however good the city regiments may be, the bulk of our defence force must be the hardy men of our rural units, and anything which has a possibility of weakening that portion of the Active Militia is, in my opinion, greatly to be deprecated.

I, therefore, recommend that "Central Armouries" should cease to be provided for rural regiments, and that, in their stead, plain substantial buildings should be hired, as at present, for company armouries at the company head-quarters.

So soon as District Staff Adjutants are appointed to all the Military Districts, more frequent inspections of the arms and equipment of rural companies should be made, and this would minimize the risk of deterioration; but I strongly recommend that, to make inspections more effective, a thoroughly qualified Armourer should form part of the staff of each Military District, who should accompany the Staff Officer at all inspections.

CONCLUSION.

(23) I must, in conclusion, place on record my satisfaction at the very efficient manner in which the officers of my Headquarters' Staff, and also those of the District Staffs, have performed the responsible duties of their respective appointments. The large concentration of troops called for by the receptions to Their Royal Highnesses, the Duke and Duchess of Cornwall and York, entailed an amount of extra work upon the staff that probably no one but the General Officer Commanding can properly appreciate.

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That all the military arrangements were effected without any hitch or miscarriage is due to the careful and able manner in which my orders were carried out by my staff officers and their subordinates, to whom the greatest credit is due.

I desire also to express my very warm appreciation of the courtesy and ready co-operation extended to me by the officials of the Civil Branch of your Department.

I have the honour to be,

Sir,

Your obedient servant,

R. H. O'GRADY-HALY, Major-General,

Commanding Canadian Militia.

OTTAWA, 31st December, 1901.

APPENDIX B.

List of Certificates issued to Officers, Non-Commissioned Officers and Men of the Active Militia during the Year ended December 31, 1901.

Arm and Station.	Long Course.		Short Course.		Special Course.		Musketry Course.				Field Officers'.		Cap-tains'.		Sub-alterns'.		Drill Ser-geants'.		N. C. O.		Equitation.	Trumpeters' and Buglers'.			Sergeant Farriers.	Total.
	A	B	A	B	A	B	Officers'		N.C.O.s' and Men.		Long.	Short.	Special.	Short.	Special.	Long.	Short.	Short.	Short.	Special.		1st.	2nd.	3rd.		
							Extra.	Ordin-ary.	Extra.	Ordin-ary.											Short.				Special.	Short.	Special.
		1st.	2nd.	1st.	2nd.	1st.	2nd.	1st.	2nd.	1st.	2nd.	1st.	2nd.	1st.	2nd.	1st.	2nd.	1st.	2nd.	1st.	2nd.	1st.	2nd.	3rd.		
Cavalry, Toronto.....																									79	
Canadian Mtd. Rifles, Winnipeg.																									30	
Artillery, Field, Kingston.....																									50	
" Garrison, Quebec.....		1				6	5																		18	
Infantry, London																									95	
" Toronto.....		7																							149	
" St. Johns, Que.....	1																								32	
" Fredericton																									68	
" Quebec.....																									24	
Canadian School of Musketry, Ottawa.....																									34	
Total	1	8				6	5																		579	

* Infantry certificates.

AYLMER, Colonel,
Adjutant General.

APPENDIX C.

RETURN of Field Batteries, C.A., which performed Annual Drill during the Year 1901, showing type of gun used, and gun ammunition expended at practice.

Battery.	TYPE OF GUN.					Station at which Gun Practice was carried out.
	B.L., 12-pr. 6 cwt.		R.M.L., 9-pr. 8 cwt.			
	Shell, Shrapnel.	Shot, case.	Shells.		Shot, case.	
			Common.	Shrapnel.		
R. C. F. A { ' A ' Battery	141	91				Field Artillery Camp, Toronto.
{ ' B ' " 	140	4				
1st Bde. Division . . . { 11th Guelph	133	12				
{ 16th " 	137	17				
2nd Bde Division . . . { 4th Hamilton	84	12				
{ 7th St. Catharines . . .	128	12				
{ 9th Toronto	91	8				
1st ' Quebec '	139	13				
2nd ' Ottawa '	139	15				
3rd ' Montreal '	133	14				
5th ' Kingston '	104	14				
8th ' Gananoque '	119	14				
10th ' Woodstock '	117	9				
12th ' Newcastle '	140	17				
13th ' Winnipeg '	130	14				
14th ' Durham '			27	74	21	
Total	1,875	194	27	74	21	

The 6th and 15th Field Batteries did not practice.

AYLMER, Colonel,
Adjutant General.

APPENDIX C (a).

RESULTS of Battery Service and Competitive Practice at Deseronto, 1901.—Time Allowance for Series I, II, III.

SERIES.	TIME FROM ACTION TO				Rate of Ord. Fire.	Range, yds.	No. of ROUNDS FIRED.			EFFECT.		No. of D.'s fired at.	Hits per Shell.	Men hit per Shell.	MARKS FOR HITS.		FIRE DISCIPLINE		TOTAL MARKS.
	1st Gun.	1st Time Sharp.	Ord. Fire.	End of Series.			Percussion Sharp.	Time Sharp.	Case.	Hits.	Men.				Possible.	Gained.	Lost.	Full Marks 100 Gained.	
1st 'Quebec' Field Battery.....	I 1 00	5 45	8 53	15 00	10	3,450	8	27	...	64	20	41	1 08	0 57	164	80	9		
												5 Dummies	ies blown down.		...	5			
	II 1 00	4 26	7 15	10 00	10	2,800	6	33	...	132	41	47	3 00	0 93	94	82	10		
	III 1 00	3 48	4 37	15 00	15	1,150	6	30	...	311	45	45	8 06	1 02	90	90	4		
				Cavalry Target	...	...	...	...	13	9	2	5 Horses	...	...	30	18			
'A' Battery, R.C.F.A.	I 0 46	4 36	7 34	15 00	15	3,450	6	31	...	9	9	41	0 24	0 24	164	36	1		
	II 1 22	4 05	6 05	15 00	15	2,850	5	35	...	101	40	47	2 05	1 00	94	80	1		
	III 0 42	3 15	5 20	15 00	15	1,050	6	37	...	426	45	45	9 09	1 04	90	90	1		
				Cavalry Target	...	...	...	...	19	10	1	4 Horses	...	...	30	12			
					...		...	...							378	275	23	77 +	50% of score = 214½.
3rd 'Montreal' Field Battery.....	I 0 57	6 50	11 21	15 00	10	3,450	10	22	...	23	15	41	...	...	164	60	4		
	II 1 50	5 10	11 18	15 00	10	2,850	6	31	...	259	45	47	...	...	94	91	12		
	III 2 54	5 21	8 41	15 00	10	1,150	6	34	...	316	45	45	90	90	14		
				Cavalry Target	14	18	5	5 Horses	30	30			
											378	271	30	70 +	50% of score = 205½.

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2nd 'Ottawa' Field Battery.....	I	0	37	4	25	11	10	15	00	15	3,450	8	30	20	16	41	1 52	0 42	164	64	3	50% of score=177.
	II	1	00	5	16	8	25	15	00	15	3,100	8	34	....	....	....	47	....	....	94	....	1
	III	1	09	5	40	9	00	15	00	15	1,100	8	27	...	280	45	45	8 00	1 02	90	90	6	
							Cavalry	Target	....	....	....	....	15	9	3	Horses	5	....	....	30	20	10
8th 'Gananoque' Field Battery...	I	1	08	10	53	Did not get to Battery																50% of score=169.	
	II	1	25	5	52	Fire..	15	00	3,500	16	8	13	6	4	0 54	0 25	264	24		5
	III	1	05	7	08	11 06	15	00	10	10	950	10	29	242	44	45	6 02	1 12	90	88		11
							Cavalry	Target	14	21	4	Horses	5	30	26		30
16th Field Battery, 1st Bde. Div....	I	0	55	3	55	8	30	15	00	10	3,500	6	28	18	7	41	0 56	0 22	164	28	6	50% of score=168.
	II	1	45	6	40	11 03	15	30	10	2,900	7	27	...	23	16	47	0 67	0 48	94	32	6		
	III	1	02	4	00	5 55	15	00	10	1,000	6	39	....	292	44	45	6 05	0 98	99	88	5	
							Cavalry	Target	....	....	....	....	17	8	4	Horses	3	....	....	30	22	17
11th Field Battery, 1st Bde. Div ...	I	1	03	9	35	12	55	16	00	15	3,500	6	18	...	3	3	14	0 12	0 12	164	12	2	50% of score=162.
	II	1	10	4	29	9	16	15	00	15	2,900	6	32	....	24	14	47	0 63	0 36	94	28	4
	III	0	51	3	35	6	11	15	30	10	1,109	6	40	....	283	45	45	6 15	0 97	90	90	6
							Cavalry	Target	....	....	....	....	12	13	2	Horses	4	....	....	30	16	12
5th 'Kingston' Field Battery.....	I	0	48	9	23		16	00	3,375	9	10	...	12	4	41	0 63	0 21	164	16	3	50% of score=162.
	II	1	36	7	51	11	30	16	00	15	2,750	10	24	....	73	33	47	2 03	0 97	94	66	7
	III	3	25	12	07	....		15	00	....	1,225	18	8	....	82	32	45	3 01	1 02	90	64	4
							Cavalry	Target	....	....	....	....	14	2	1	Horses	1	....	....	30	6	14

APPENDIX C (a)—Concluded.

RESULTS of Battery Service and Competitive Practice at Deseronto, 1901.—Time Allowance for Series I, II, III—Concluded.

SERIES.	TIME FROM ACTION TO				Rate of Ord. Fire.	Range, yds.	No. OF ROUNDS FIRED.			EFFECT.		No. of D.'s fired at.	Hits per Shell.	Men hit per Shell.	MARKS FOR HITS.		FIRE DISCIPLINE		TOTAL MARKS.
	1st Gun.	1st Time Sharp.	Ord. Fire.	End of Series.			Percussion Sharp.	Time Sharp.	Case.	Hits.	Men.				Possible.	Gained.	Lost.	Full Marks 100 Gained.	
12th 'Newcastle' Battery.....	I 0 50	6 41	10 59	15 00	10	3,450	10	25	...	6	4	41	0 17	0 11	164	16	7		
	II 1 25	6 55	10 14	15 00	10	2,750	8	29	...	5	5	47	0 14	0 14	94	10	6		
	III 0 58	3 11	5 35	15 00	10	1,150	6	37	...	312	45	45	7 25	1 00	90	90	5		
			Cavalry Target..		...	...	...	...	17	...	...	3	...	...	30	22			
7th 'St. Catharines' Field Battery.....	I 0 47	7 20	10 07	15 00	15	3,450	10	21	...	9	6	41	0 29	0 19	164	24	7		
	II 0 47	5 17	9 36	15 00	15	2,840	7	28	...	33	23	47	0 94	0 65	94	46	5		
	III 0 45	8 25	10 25	15 00	15	1,075	13	24	...	28	16	45	0 76	0 43	90	32	3		
			Cavalry Target..		...	...	...	...	12	18	4	Horses	...	...	30	24			
13th 'Winnipeg' Field Battery.....	I 1 37	8 35	12 00	15 00	15	3,350	10	20	...	5	5	41	0 16	0 16	164	20	8		
	II 1 31	8 01	11 55	16 00	15	2,900	8	21	...	24	15	1 man	blown down	down	...	1			
	III 1 12	4 13	6 58	15 00	15	1,100	6	37	...	260	44	45	0 93	0 55	94	30	10		
			Cavalry Target..		14	5	...	3	30	6			
					378	145	29	71 +	50% of score = 143½	

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4th 'Hamilton' Field Battery..... <div>I II III</div>	0 51	14 30	Nil.	15 00	...	3,525	18	2	...	7	4	41	0.35	0.02	164	16	6	50% of score=132.
	1 44	11 53	Nil.	15 00	...	2,900	12	8	...	9	6	47	0.45	0.03	94	12	5	
	1 41	12 10	Nil.	15 60	...	1,100	14	6	...	30	23	45	1.05	1.01	90	46	3	
			Cavalry	Target..	...				12	8	3	Horses	...	...	30	18	
															378	92	14	
															164	8	15	
														0.07	...	2	12	
													blown	0.05	94	2	11	
													3.93	0.88	90	78		
10th 'Woodstock' Field Battery..... <div>I II III</div>	1 17	6 55	11 16	15 00	10	3,400	6	23	...	9	2	41	0.31	0.07	164	8	15	50% of score=120.
	5 03	10 33	14 28	15 00	10	2,700	6	12	...	1	1	2 men	0.05	0.05	94	2	12	
	1 13	4 10	6 53	15 00	10	1,150	6	38	...	173	39	45	3.93	0.88	90	78	11	
			Cavalry	Target..	...				9	9	4	Horses	...	...	30	26	
														...	378	116	38	
															164	20	5	
													0.16	0.16	94	6	9	
													0.01	0.01	90	...	8	
													...	...	30	26	
14th 'Durham' Field Battery..... <div>I II III</div>	0 41	6 43	14 13	16 00	15	3,450	8	22	...	5	5	41	0.16	0.16	164	20	5	50% of score=104.
	1 55	7 00	14 05	16 12	15	2,925	8	21	...	3	3	47	0.01	0.01	94	6	9	
	2 00	7 25	12 25	16 00	15	1,700	5	15	...	0	0	45	...	...	90	...	8
			Cavalry	Target..	...				21	10	4	Horses	...	...	30	26	
														...	378	52	22	
															164	32	12	
													1.22	0.31	94	8	10	
													0.30	0.17	90	Nil.	7	
													Nil.	Nil.	30	10		
9th 'Toronto' Field Battery..... <div>I II III</div>	1 35	9 20	13 30	15 00	15	3,475	6	16	...	29	8	41	1.22	0.31	164	32	12	50% of score=96.
	2 30	10 00	13 30	15 00	15	3,000	8	15	...	7	4	47	0.30	0.17	94	8	10	
	1 42	7 25	11 17	15 00	15	1,675	8	14	...	Nil.	Nil.	45	Nil.	Nil.	90	Nil.	7	
			Cavalry	Target..	...				8	4	1	Horses	...	...	30	10	
														...	378	50	29	
															164	32	12	
													1.22	0.31	94	8	10	
													0.30	0.17	90	Nil.	7	
													Nil.	Nil.	30	10		

AYLMER, Colonel,
Adjutant General.

APPEN

GUN PRACTICE,

Competitive Gun Practice at Island of

Corps.	Battery Commander.	40-pr. R.B.L. Practice. Targets—1st Series.—A four gun battery with detachments, at a range of about 3,000 yards. 2nd Series.—A double line of 50 infantry dummies, at a range of about 450 yards.											
		Time from action to				Rounds fired.			Effect.				Fire discipline, possible 50.
		1st Gun.	1st Time shell.	Battery fire.	End of practice.	Common shell.	Segment shell.	Case shot.	Guns disabled.	Artillery dummies hit.	Infantry dummies hit.	Total.	
<i>Companies on the Higher Establishment.</i>		' "	' "	' "	' "								
R. C. G. A., No. 1 Co...	Lt.-Col. T. Benson...	1 50	4 30	6 00	15 00	5	15	3	4	8	2	64	41
" No. 2 " ...	Lt.-Col. A. A. Farley.	1 02	3 00	8 00	15 00	6	15	4	3	6	9	78	36
2nd Regt. C.A., No. 1 Co	Capt. E. C. Cole.....	1 45	5 00	....	15 00	4	6	3	0	0	3	12	30
" No. 2 "	Capt. E. M. Renouf..	1 40	....	....	15 00	9	0	4	0	1	5	24	42
" No. 3 "	Lieut. J. A. Ewing...	2 40	10 00	13 00	15 00	5	10	2	1	2	3	26	27
Cobourg Co., G.A. ..	Lieut. J. G. Battell..	1 30	5 30	13 00	15 00	8	6	4	1	3	2	26	45
<i>Companies on the Lower Establishment.</i>													
3rd Regt. C.A., No. 1 Co	Capt. B.R. Armstrong	1 30	7 50	....	20 00	5	8	2	1	2	1	18	38
" No. 2 "	Capt. J. B. M. Baxter	2 20	7 10	....	20 00	7	13	2	0	0	2	8	41
" No. 3 "	Capt. W. E. Foster...	2 20	7 10	....	20 00	4	12	2	0	4	3	24	39
" No. 4 "	Capt. F. A. Foster...	2 50	7 30	...	20 00	4	10	2	1	3	1	22	39
4th Regt. C.A., No. 1 Co	Capt. A. A. Bartlett..	1 15	8 10	....	19 10	8	12	2	1	2	6	38	43
" No. 2 "	2nd Lt. M. H. Sprague	1 45	9 50	....	20 00	8	8	2	0	1	6	28	39
" No. 3 "	Capt. W.A. Johnstone	3 75	7 50	9 40	20 00	6	8	2	0	1	0	4	32
" No. 4 "	Lieut. C.C. Richards.	1 55	8 30	..	20 00	5	7	2	1	4	3	34	30
6th R'g. C. A. Nos. 1&2 Cos	Capt. J.E.P. Bergeron	1 45	11 30	....	15 00	5	10	4	0	2	1	12	22
" No. 3 Co...	.....	*	....	....	....	....	....	....	....	....	....	....	....
" No. 4 " ...	Capt. E. Gelly.....	1 30	6 30	9 15	20 00	5	12	2	1	2	1	18	28
						94	152	42					

* Did not carry out 40 pr. practice.

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DIX D. (a.)

GARRISON ARTILLERY.

Orleans, August 19 to 24, 1901.

5-inch B.L., Howitzer Practice. Targets—Four guns without detachments, in rectangle, at a range of about 2,000 yards.									Marks obtained.			Remarks.	
Time from action to			Rounds fired, practice shell.	Effect.			Fire discipline, possible 50.	40-pr. R.B.L., practice.	5-inch B. L. Howitzer practice.	Total.			
1st Gun.	Battery fire.	End of practice.		Guns disabled.	Hits in rectangle.	Total.							
"	"	"											
1 42	3 00	12 45	20	0	7	28	40	105	68	173			
1 36	8 00	13 00	20	0	9	36	40	114	76	190			
4 00	.....	13 00	17	0	8	32	26	42	58	100		
3 15	.....	13 00	10	0	5	20	30	66	50	116		
2 48	.....	13 00	15	0	8	32	28	53	60	113		
1 00	7 30	13 00	20	0	5	20	39	71	59	130		Considerable delay in 40.pr. practice owing to misfires.	
1 25	12 45	13 00	13	0	4	16	43	56	29.5	85.5		Practice and B. C's observation much impeded by smoke down the range.	
1 40	8 20	12 00	20	0	13	53	33	49	29.5	78.5		Considerable delay due to misfires.	
1 50	9 55	13 00	16	0	3	12	37	63	43	106			
2 30	5 15	13 00	20	0	12	48	34	61	43	104			
1 35	11 45	12 45	20	0	6	24	27	81	24.5	105.5		Firing in 40-pr. practice much delayed by misfires.	
2 50	6 25	13 00	18	0	6	24	31	67	24.5	91.5			
.....	.....	.....	.....	.....	.....	.....	.....	36	41	77		
.....	.....	.....	.....	.....	.....	.....	.....	64	41	105		40-pr. practices greatly delayed by misfires.
.....	.....	.....	.....	.....	.....	.....	.....	34	51	85		
.....	.....	.....	.....	.....	.....	.....	.....	.....	27.5	27.5		
.....	.....	.....	.....	.....	.....	.....	.....	46	27.5	73.5		
			209										

AYLMER,
Colonel, Adjutant General.

APPENDIX D.

RETURN of Garrison Artillery Units C. A. which performed Annual Drill during the year 1901, showing type of gun used, and gun ammunition expended at practice.

TYPE OF GUN.										Station at which gun practice was carried out.
B. L.			R. B. L.			B. M. L.				
6" Gun.	5" Howitzer.		40-Pr.	20-Pr.	9" Gun.	13-Pr.				
Shot, Palliser.	Shell, Common, Iron.		Shell.	Shell, Common.	Shot, Palliser.	Shell.				
			Common. Segment						Shot, Case.		Common. Shrapnel.
R. C. G. A.	40	11	30	7				Island of Orleans, P.Q.		
1st Regiment C. A. (1st Division					44			York Redoubt. } Halifax, N.S.		
2nd "	42	18	16					Pt. Pleasant. }		
3rd "	33	20	43	9				} Island of Orleans, P.Q.		
4th "	36	27	35	8						
5th "	19			8				} Esquimalt and Victoria, B. C.		
6th "	38	10	22	6		30				
Cobourg Company	20	8	6	4				} Island of Orleans, P.Q.		
Total	19	209	152	42	44	30	30			

ALYMER, Colonel,
Adjutant General.

APPENDIX E.

RETURN showing the number of Officers, N. C. Officers, Men and Horses trained during the Year 1901, at Local Headquarters.

Military District	Authorized Establishment called out.			Received 12 days training.			Received under 12 days training.			Untrained.		
	Officers.	N. C. Officers and Men.	Horses.	Officers.	N. C. Officers and Men.	Horses.	Officers.	N. C. Officers and Men.	Horses.	Officers.	N. C. Officers and Men.	Horses.
No. 1.....	86	840	14	76	798	14	.....	.....	.....	10	42	.....
2.....	173	1,951	23	165	1,876	21	8	75	.....	.....	.....	2
3 and 4....	105	1,079	16	78	974	16	.....	.....	.....	27	105	.....
5.....	131	1,706	19	121	1,666	19	.....	37	.....	10	3	.....
6.....	36	387	7	25	350	6	1	28	.....	10	9	1
7.....	120	1,328	96	81	1,137	94	.....	.....	.....	39	191	2
8.....	49	562	7	43	520	7	6	33	.....	.....	9	.....
9.....	113	1,596	16	97	1,244	16	8	213	.....	8	139	.....
10.....	48	602	321	38	556	282	.....	7	.....	10	39	39
11.....	64	871	7	43	698	.....	1	47	.....	20	126	7
12.....	15	272	53	12	248	49	.....	12	1	3	12	3
Ottawa Brigade.	70	817	89	58	729	82	1	78	2	11	10	5
Total.....	1,010	12,011	668	837	10,796	606	25	530	3	148	685	59

APPENDIX E.—Concluded.

RETURN showing the number of Officers, N. C. Officers, Men and Horses trained during the Year 1901, in District Camps.

Military District	Authorized Establishment called out.			Received 12 days training.			Received under 12 days training.			Untrained.		
	Officers.	N. C. Officers and Men.	Horses.	Officers.	N. C. Officers and Men.	Horses.	Officers.	N. C. Officers and Men.	Horses.	Officers.	N. C. Officers and Men.	Horses.
No. 1.....	295	3,148	342	225	2,636	305	3	64	.....	67	148	37
2.....	368	3,968	706	296	3,356	628	7	90	2	65	522	76
3 and 4....	316	3,318	598	238	2,602	566	.....	.....	.....	78	716	32
5.....	228	2,407	481	182	1,889	458	1	3	.....	46	515	24
6.....	111	1,187	65	80	718	65	1	14	.....	30	455	.....
7.....	230	2,420	84	166	1,561	80	.....	.....	.....	64	859	4
8.....	129	1,331	397	106	1,187	388	3	27	5	20	117	4
9.....	188	2,128	101	154	1,839	100	3	13	.....	31	276	1
10.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
11.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
12.....	46	462	4	40	442	4	1	2	.....	5	18	.....
Ottawa Brigade.	9	127	50	9	116	50	.....	.....	.....	.....	11	.....
Total.....	1,920	20,496	2,828	1,496	16,346	2,614	19	213	7	406	3,937	178

SUMMARY.

District Camps .	1,920	20,496	2,828	1,496	16,346	2,644	19	213	7	406	3,937	178
Local Head quarters	1,010	12,011	668	837	10,796	606	25	530	3	148	685	59
Total	2,930	32,507	3,496	2,333	27,142	3,250	44	743	10	554	4,622	237

Total Regimental Establishment of Active Militia, Officers, N.C. Officers and Men, on December 31, 1901.....	38,090
Total Regimental Establishment of Active Militia, Officers, N.C. Officers and Men of Corps ordered to drill during 1901.....	35,437
Total Officers, N.C. Officers and Men of Active Militia, trained or partly trained during 1901.....	30,262

AYLMER, Colonel,
Adjutant General.

APPENDIX F.

ROYAL REVIEW, QUEBEC,

IN HONOUR OF

HIS ROYAL HIGHNESS THE DUKE OF CORNWALL AND YORK,

SEPTEMBER 17, 1901.

DIVISION OF ALL ARMS.

COMMANDING—MAJOR GENERAL R. H. O'GRADY HALY, C.B., D.S.O.

ADJUTANT GENERAL—COLONEL THE HON.
D. A. G.—LIEUT.-COLONEL B. H. VIDAL.
D. G. M. S.—COLONEL J. H. L. NEILSON.

D.A.A.G. (B)—LIEUT-COLONEL CRAWFORD LINDSAY, R.O. (Supply).
 " " G. S. VIEN, 6TH REGT., C.A. "
 " " CAPTAIN F. D. LAFFERTY, R.C.G.A. (Transport).

AIDES-DE-CAMP—MAJOR E. T. H. HEWARD, U. L.
LIEUT. G. W. M. FARRELL, 66th REGIMENT.

[illegible]

APPENDIX G.
ROYAL REVIEW, TORONTO,
IN HONOUR OF
HIS ROYAL HIGHNESS THE DUKE OF CORNWALL AND YORK

OCTOBER 11, 1901.

COMMANDING—MAJOR GENERAL R. H. O'GRADY-HALY, C.B., D.S.O.

ADJUTANT GENERAL—COLONEL THE HONOURABLE M. AYLMER.

A. A. G. (a)—MAJOR A. O. FAGES, R.C.R.

A. D. C.—MAJOR E. T. H. HEWARD, U.L.

PROVOST MARSHAL—CAPT. R. O. MONTGOMERY, 10th Royal Grenadiers.

Employed under the Quartermaster General for Transport and Supply Duties :—

MAJOR V. SANKEY, R.O., MAJOR H. J. SNELGROVE, 40TH REGT., MAJOR T. R. ATKINSON, 39TH REGT.

QUARTERMASTER GENERAL—COLONEL W. H. COTTON.

A. A. G. (b)—LT.-COLONEL R. L. NELLES, R.O.

D. A. A. G. (b)—CAPTAIN F. D. LAFFERTY, R.C.G.A.

A. D. C.—LIEUT. R. COCKBURN, SUFFOLK REGIMENT.

PRESENT ON PARADE.														
	OFFICERS.		W. O. and Sergeants.	Band.	Buglers, Drummers and Trumpeters.	Rank and File.	Total.	VEHICLES.						Horses.
	Staff.	Regimental.						Guns, Carriages and Limbers.	Ammunition Wagons and Limbers.	Store Wagons.	Forge Wagons.	Ambulance Wagons.	Total Vehicles.	
	3	3	3
CAVALRY DIVISION.	Col. F. L. Lessard, C.B., A.D.C.) Major R. Brown, P.L.D.G.) Major V.A.S. Williams, R.C.D.)													
	Commander.													
	Corps.													
	G. G. B. Guard.....	..	20	27	..	4	152	203	4	4	166
	1st Hussars.....	..	20	29	183	232	2	2	197
2nd Dragoons.....	..	18	19	..	2	159	198	..	..	..	..	..	180
4th Hussars.....	..	20	22	..	4	164	210	..	..	..	4	4	191
P. L. D. Guards.....	..	6	8	..	1	59	74	..	..	..	..	..	65

[illegible]

APPENDIX G—Concluded.

PRESENT ON PARADE.														
OFFICERS.							VEHICLES.							
Staff.	Regimental.	W. O. and Sergeants.	Band.	Buglers, Drummers and Trumpeters.	Rank and File.	Total.	Guns, Carriages and Limbers.	Ammunition Wagons and Limbers.	Store Wagons.	Ambulance Wagons.	Total Vehicles.	Horses.		

REPORT OF THE GENERAL OFFICER COMMANDING

SESSIONAL PAPER No. 35

Corps.		Commander.		29	48	35	43	516	671					60	3	10	8	81	1,464												
2nd Regt. Q. O. R.		Lt.-Col. H. M. Pellatt		29	48	35	43	516	671																						
12th Regt. York Rangers		" T. Lloyd		25	29	24	8	230	316																						
13th Regt. Infantry		Major J. S. Stoneman		25	32	33	25	251	366																						
36th Peel Regt.		Lt.-Col. G. T. Evans		26	30	24	7	205	292																						
37th Regt. Haldimand Rifles		" A. T. Thompson		28	31	22	8	276	365																						
19th } Regt. Composite.		" E. Cruikshank.		30	30	32	6	260	358																						
44th }		Capt. A. T. Hobbs		2	7		1	24	34																						
No. 6 Bearer Company		" A. M. Hayes		2	5			16	23																						
2ND INFANTRY DIVISION.																															
Divisional Staff.																															
Commanding		Col. L. Buchan, C.M.G.	4		1				5																						
A. A. G.		Lt.-Col. W. E. Hodgins.																													
A. A. G. (b)		Major C. F. Winter																													
Orderly Officer		Capt. P. E. Thacker																													
3RD BRIGADE.																															
Commanding		Lt.-Col. J. Hughes	3		2				5																						
Brigade Major		" T. D. R. Hemming.																													
Orderly Officer		Lieut. G. Hughes																													
Corps.																															
14th Regt. P. W. O. R.		Major J. Galloway		17	25	24	6	196	268																						
15th " Argyll L. I.		" J. E. Halliwell		16	21	21	6	210	274																						
42nd Lanark and Renfrew Regt.		Lt.-Col. L. Irving		17	24	22		209	272																						
43rd Regt. Ottawa and Carleton Rifles		Major S. Maynard Rogers		29	31	24	8	303	395																						
45th Victoria Regt.		Lt.-Col. S. Hughes		24	25	14	6	207	276																						
46th Durham Regt.		Major H. A. Ward		24	25	18	7	255	329																						
57th Regt. Peterborough Rangers		Lt.-Col. E. B. Edwards		19	29	28	16	177	269																						
4TH BRIGADE.																															
Commanding		Lt.-Col. J. Peters, A.D.C.	3		2				5																						
Brigade Major		" G. Acheson																													
Orderly Officer		Lieut. F. Balfour																													
Corps.																															
22nd Regt. Oxford Rifles		Lt.-Col. J. C. Hegler		21	30	24	8	248	331																						
26th " Middlesex L.I.		" R. McEwen		29	32	24	8	255	348																						
27th Lambton Regt.		" C. S. Ellis		32	31	24	8	256	351																						
30th Regt. Wellington Rifles		" J. Mutrie		31	32	30	10	350	453																						
32nd Bruce Regt.		" A. Weir		26	31	24	4	273	358																						
33rd Huron Regt.		" J. A. S. Varcoe		29	33	29	7	298	396																						
No. 7 Bearer Company		Major G. S. Rennie		1	7		1	24	33																						
No. 7 Field Hospital		" J. M. Cotton		3	5			16	24																						
Totals																			34	743	1,028	655	348	7,993	10,801	60	3	10	8	81	1,464

AYLMER, Colonel, Adjutant General.

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APPENDIX H.

ROYAL REVIEW, HALIFAX, IN HONOUR OF HIS ROYAL HIGHNESS THE DUKE OF CORNWALL AND YORK, 19TH OCTOBER, 1901.
FIELD STATE OF CORPS OF THE CANADIAN MILITIA.

PRESENT ON PARADE.

CORPS.	COMMANDER.	OFFICERS.		W. O. and Sergeants.	Band.	Buglars, Drummers and Trumpeters.	Rank and File.	Total.	VEHICLES.				Horses.
		Staff.	Regimental.						Guns, Carriages and Limbers.	Ammunition Wagons and Limbers.	Store Wagons.	Ambulance Wagons.	
Staff.....	Lt.-Col. J. D. Irving.....	13						13					13
8th P. L. N. B. Hussars.....	" H. M. Campbell.....		25	30		4	289	348					312
<i>Artillery.</i>													
Staff.....	Major R. L. Maltby.....	3						3	6				3
12th Field Battery, C. A.....			5	10		2	68	85					48
1st Regt. C. A., 1st Division.....	Lt.-Col. F. H. Oxley.....		20	30	4	24	174	252					
" 3 Co.'s, 2nd Division.....			8	12		3	98	121					3
3rd Regt. C. A.....	Lt.-Col. G. W. Jones.....		16	18	24	4	185	247					3
4th ".....	" J. A. Longworth.....		16	18	20	3	165	222					3
Charlottetown Engineer Co.....	Major W. A. Weeks.....		2	4		1	78	85					
<i>Infantry.</i>													
62nd Regt. St. John Fusiliers.....	Lt.-Col. H. H. McLean.....		29	30	24	8	279	370					2
63rd " Halifax Rifles.....	" J. N. Crane.....		26	39	26	14	245	350					3
66th " Princess Louise Fusiliers..	" B. A. Weston.....		25	38	32	16	396	507					3
69th " Annapolis.....	" C. W. Schaffner.....		32	37	24	10	302	405					4
78th " Highlanders.....	" H. T. Laurence.....		26	30	21	8	253	338					4
82nd " P. E. I., 2 Co.'s.....			6	6		2	72	86					
93rd " Cumberland, 6 Co.'s.....	" W. Letcher.....		17	22		5	187	231					4
<i>Medical Corps.</i>													
No. I Bearer Co.....	Major G. C. Jones.....		1	7		1	39	48				3	8
" VIII Field Hospital.....	" H. D. Johnson.....		3	5			15	23					
" VIII Bearer Co.....	" M. McLaren.....		3	7		1	21	32					5
Total.....		16	260	343	195	86	2,866	3,766	6	6		3	418

AYLMER, Colonel, Adjutant-General.

APPENDIX J.

To the General Officer Commanding the Canadian Militia, President of the Royal Military College of Canada.

KINGSTON, ONT., 31st January, 1902.

SIR,—I have the honour to forward my report on the Royal Military College from the 31st October, 1900, the date of Col. Kitson's resignation of the Commandantship, till 31st December, 1901.

From 1st November, 1900, till 20th March, 1901, Major C. C. Van Straubenzee, R.A., acted as Commandant.

On 21st March, 1901, I assumed the duties of my appointment on my arrival from England.

STRENGTH.

1. On 31st October, 1900, there were 75 Gentlemen Cadets on the strength of the College. Of these 13 graduated in June, 1901, 2 received commissions in the South African Constabulary, and 5 were withdrawn—a total decrease of 20.

On September 1st, 1901, there were 55 old Gentlemen Cadets and 33 new ones—a total of 88. Of these, up to 31st December, 1901, 3 have been withdrawn and 1 has received a commission in the 2nd Canadian Mounted Rifles, of the Canadian Contingent, leaving a total of 84.

HEALTH.

2. The health has been, on the whole, excellent. The Medical Officer in charge draws attention to the increase in weight and height, and general improvement of physique, due to the system of drill and gymnastics pursued here.

CONDUCT.

3. I am able to report that the conduct of the Gentlemen Cadets has been satisfactory.

EXAMINATIONS.

4. The midsummer examinations have been to some extent disappointing, but it must be remembered that the senior class had been depleted of many of its best men in 1900, by their leaving to take Commissions.

The result has been that whilst those at the top of the graduating class well maintained the credit of the College, those lower down possessed a somewhat unequal knowledge.

The results of the French examination were particularly disappointing—but I hope that by a system of smaller classes and more individual attention, better results may be obtained in the future.

The results in the Physics and Chemistry examination were not good, and to produce a higher standard in the latter subject, it has been decided to make a slight knowledge of it obligatory at future entrance examinations.

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OFFICERS' COURSE.

5. A long course for 11 officers was held from February to April, 1901. Eight of these obtained first-class, and three second-class certificates. The result was on the whole fair ; but owing to the weakness shown by most of the candidates in Military Surveying and Reconnaissance, I am inclined to think that a greater proportion of time should be devoted to these subjects than is allotted to them under the Regulations and Orders for the Militia. (Pages 256 & 259.)

FRONTIER RECONNAISSANCE SURVEY.

6. During the Midsummer vacation, a party of 8 Gentlemen Cadets, Sergt. Browne of the R.M.C. Staff, together with Capt. Bogart and Lieut. Caldwell of the Reconnaissance Survey Dept., the whole under the superintendence of Major U. C. Van Straubenzee, Royal Artillery, were engaged in reconnaissance work at three points in Western Ontario. Valuable maps were produced which—if reduced and reproduced on a proper scale—would be of great value for military purposes. And an able report was drawn up by Major Van Straubenzee dealing with the district reconnoitred from a strategical and tactical point of view. This report forms a valuable addition to the intelligence knowledge of Canada.

7. By the courtesy of the Dean, the senior class again visited McGill University, and witnessed many interesting experiments and tests of materials in the workshops.

Through the kind and ready co-operation of the Officer Commanding the Royal Canadian Field Artillery, commanding at Deseronto Artillery Camp, the Gentlemen Cadets visited the camp and witnessed different firing competitions and exercises.

At the close of the Midsummer term, the prizes were distributed by the Hon. the Minister of Militia, who was accompanied by the General Officer Commanding the Militia, President of the Royal Military College.

On September 17, 1901, the Gentleman Cadet Battalion, under my command, took part in the review held at Quebec by His Royal Highness the Duke of Cornwall and York.

On October 15, 1901, their Royal Highnesses the Duke and Duchess of Cornwall and York, accompanied by his Excellency the Governor General and the Premier of Canada, Sir Wilfrid Laurier, visited the Royal Military College, and inspected the Gentlemen Cadets at drill and gymnastics.

COLLEGE LIBRARY.

8. By collecting the Government technical books, hitherto held on charge by the various professors, and incorporating them in the College Library, I have, without any expense to the public, formed the nucleus of a good technical military and general library, which will be of great use to the Gentlemen Cadets and the Staff of the College, as well as the officers attending courses here. Further, I have thrown open the privileges of the library to the officers of the permanent force in Kingston.

NEW BUILDINGS AND REPAIRS.

9. The new hospital and the extension to the dormitory building have been begun, and, when completed, will be of great benefit to the College. An electric light plant is being installed. When it is completed, a better light than hitherto will be obtained in the College buildings, and in addition, the main road through the College grounds and the servants' cottages will be lighted—the whole being at a greatly reduced charge than under existing arrangements. Though the cost of a new gymnasium was included in the estimates for 1901-02, nothing at present has been done in this direction. Con-

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sequently our space for drill is very limited. The floor of the present gymnasium is badly in need of repair.

Perhaps the greatest want at the College is covered space for recreation in winter. None now exists, except the gymnasium and a small workshop. Consequently the Gentlemen Cadets are forced to seek amusement and recreation in the city rather than in the vicinity of the College.

Seeing this winter the difficulty of maintaining an open-air rink, I am strongly of the opinion that the erection of a covered rink would go a long way towards meeting the above mentioned want. Such a building too, could be used for drill at other seasons of the year.

DRILL, ETC.

10. The drill and gymnastics at the College have been kept up to a high standard.

In April, 1901, a selected party of forty Gentlemen Cadets with Sergt. Major James of the R.M.C staff, under Major Logan, Leicestershire Regiment, took part in the Toronto Military Tournament, giving a gymnastic display.

The results of the rifle shooting have been good. In June, 1901, the first of a series of annual matches with the R.M.C. of Sandhurst took place. It was won by the R.M.C. of Canada.

Improvements are being made to the R.M.C. Rifle Range.

A 6-Pr. Q.F. gun, and a Maxim, have been added to the College armament.

CADETS' RIDING COURSE.

11. Riding results have not been as good as they should be. This may be partly due to the changes in the teaching staff of the R.C.F.A., necessitated by the South African War. At the same time, however, through want of horses, the Gentlemen Cadets do not receive sufficient instruction in this very important branch of knowledge. Further, it must not be forgotten that artillery draught horses are not the best class of animals on which to teach riding.

COMMISSIONS.

12. During the year the following gentlemen obtained Commissions :—

South African Constabulary.—K. C. Folger and C. R. E. Willets.

Royal Engineers.—T. C. Keefer.

Indian Staff Corps.—C. A. Robertson, C. C. McLennan and F. H. Maynard.

2nd Canadian Mounted Rifles (Canadian Contingent).—W. J. Loudon.

DIPLOMAS OF GRADUATION.

13. Diplomas of Graduation have been awarded to the following gentlemen of the 1st Class, the three first-named being with 'Honours' :—

G. B. Hughes, K. M. Cameron, A. R. Chipman, T. C. Keefer, C. C. McLennan, W. B. Young, C. A. Robertson, A. Stewart, F. H. Maynard, R. M. Harcourt, W. F. Sparrow, J. F. McParland and J. McL. Mudie.

ANNUAL PRIZES.

14. The College prizes have been awarded as follows :—

Governor-General's medals for the highest aggregate of marks during the entire course : G. B. Hughes, gold medal ; K. M. Cameron, silver medal ; A. R. Chipman, bronze medal.

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Class prizes for the highest number of marks in each class : K. M. Cameron, 1st Class prize ; D. K. Edgar, 2nd Class prize ; F. T. Lucas, 3rd Class prize.

Conduct prize : Sword of Honour, G. B. Hughes.

Subject prizes, for the highest marks in the several subjects :—1st Class, K. M. Cameron received the prizes for Civil Surveying, Science, Civil Engineering, and Military Engineering ; and G. B. Hughes the prizes for Military Surveying, and Military Drills and Exercises.

For subjects finished in the 2nd Class, D. K. Edgar received the prizes for Tactics and Military Law, Mathematics, Geometrical and Engineering Drawing, and Artillery. The prize for English was won by W. C. Reid, and that for French by E. deB. Panet.

The Dominion Artillery Association prizes were won by K. R. Cameron and M. L. Gordon.

The Commandant's Musketry prize (young soldiers' course) was won by G. R. Francis.

I have the honour to be, sir,

Your obedient servant,,

RAYMOND N. R. READE. Lieut.-Colonel,

Commandant, Royal Military College.

